CALIFORNIA
OIL WORLD
and Petroleum Industry

GEOLOGICAL SURVEY
WASHINGTON
FEB 19 1941
LIBRARY

ICE MONTHLY
IRST ISSUE
RUARY, 1941

Vol. 34
No. 3
Whole
No. 1578

NOW AVAILABLE...
new SECURITY THREAD sizes!

Bevel at reverse angle forms an additional fluid seal—prevents belling during make-up.

Buttress type thread design makes stabbing easier—reduces chances of cross-threading.

Thread corners are milled smooth—no metal slivers formed during make-up.

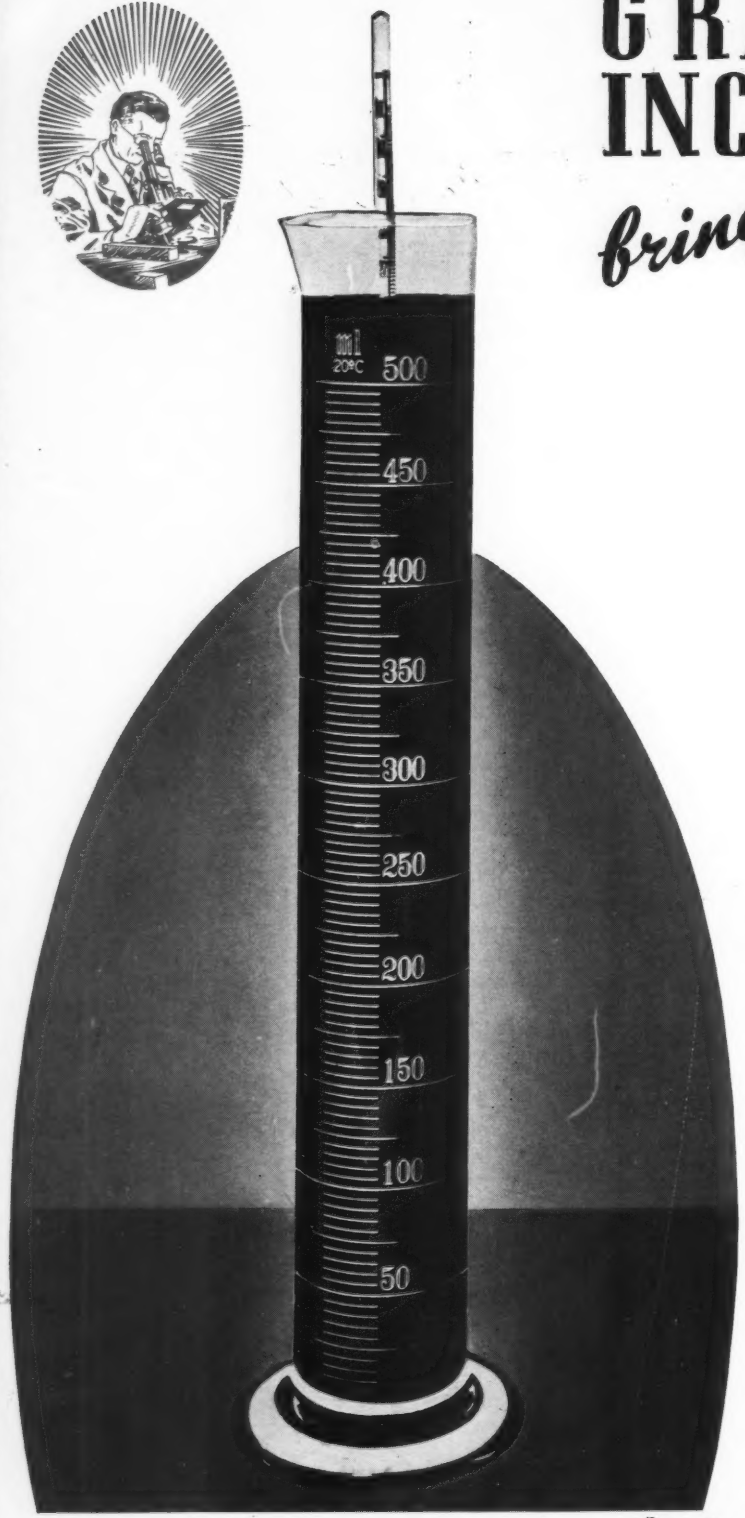
Inner square shoulder gives maximum strength in compression, torsion, bending.

New increased milling facilities at Security's Whittier Plant now enable you to have the Security Thread cut, Flush Joint on plain casing or tubing up to 9⅝" O.D....or on External Upset casing or tubing up to 9" O.D.

Now, enlarged capacity makes faster delivery possible on orders of all sizes ★★★ The Security Thread is designed to stand up under the severe handling, operating, and impact forces encountered in today's oil field operations. Specify SECURITY!

Send for ENGINEERING DATA BULLETIN No. A-1 containing important Security Flush Joint Thread design and testing data ...no obligation.

SECURITY ENGINEERING CO., INC.
WHITTIER, CALIFORNIA • PHONE 42004
5525 CLINTON DR., HOUSTON, TEX., PHONE CAPITOL 9538 • CENTRALIA, ILLINOIS, P.O. BOX 283
EXPORT: SECURITY ENGINEERING CO., INC., 420 LEXINGTON AVENUE, NEW YORK CITY
Sievers Reamers ★ Securaloy ★ Security Drillable Products



GRAVITY INCREASE

brings

4¢ Per Barrel *ADDITIONAL PROFIT.....*

By restoring the true gravity of emulsified production, Petreco electromatic dehydration frequently pays desirable *extra* dividends to the producer.

In one instance, for example, an increase in gravity from 25.7° to 26.4° API of only 180 b/d produced by one small well returned 4c per barrel, or $2,628.00 per year, additional revenue. The possibilities for extra profits, therefore, are readily apparent.

Almost every day Petreco is adding similar case histories to an already long list. A survey of your production may develop possibilities for additional profits that are equally desirable. This preliminary service involves no cost or obligation, and inquiries are invited.

PETROLEUM RECTIFYING CO. of CALIFORNIA

General Offices: 530 West Sixth Street, Los Angeles, California

Gulf Coast Division
1312 Petroleum Bldg., Houston, Texas

Eastern Division
648 Edison Bldg., Toledo, Ohio

Representatives In Principal Oil Fields and Refining Centers

PETRECO

DEHYDRATING DE-SALTING

CALIFORNIA
OIL WORLD
and Petroleum Industry

THE AUTHORITY ON THE CALIFORNIA OIL INDUSTRY

FIRST ISSUE
FEBRUARY 1941
VOL. 34 NO. 3
WHOLE NO. 1578

IN THIS ISSUE

Paloma Unitization Plan Contribution to Conservation 2

Map of Paloma Field 7

Refinery Modernization for National Defense 8

Dana Hogan Answers "Oil War Over Here" 12

Laugh This Off 14

Map of Castaic Region 16-17

Los Angeles Basin Development 18

San Joaquin Valley Development 21

Coastal District Development 24

PETROLEUM PUBLISHERS, INC. PETROLEUM BUILDING
LOS ANGELES, CALIFORNIA - MEMBER OF THE AUDIT BUREAU OF CIRCULATIONS

WALTER C. MONROE	President and Editor	VICTOR W. HEINZERLING	Assoc.-Editor
KINZIE MILLER	Vice President	DAVIS E. BROWNE	Secty.-Treas.
R. C. CONINE	Managing Editor	L. O. MILLER	Advertising Manager

R. N. RICHEY, Manager, California Oil World News Service
GEORGE S. MacDONELL, Manager, California Oil World Directory

California Oil World and Petroleum Industry is published twice a month at 828 Petroleum Bldg., 714 West Olympic Blvd., Los Angeles, California. Entered as Second-class Matter January 1, 1937, at the post office at Los Angeles, California, under the Act of March 3, 1879. Subscription price: $1 per year in U. S. and Possessions, $2 in foreign countries, including Canada. Member of the Audit Bureau of Circulations.

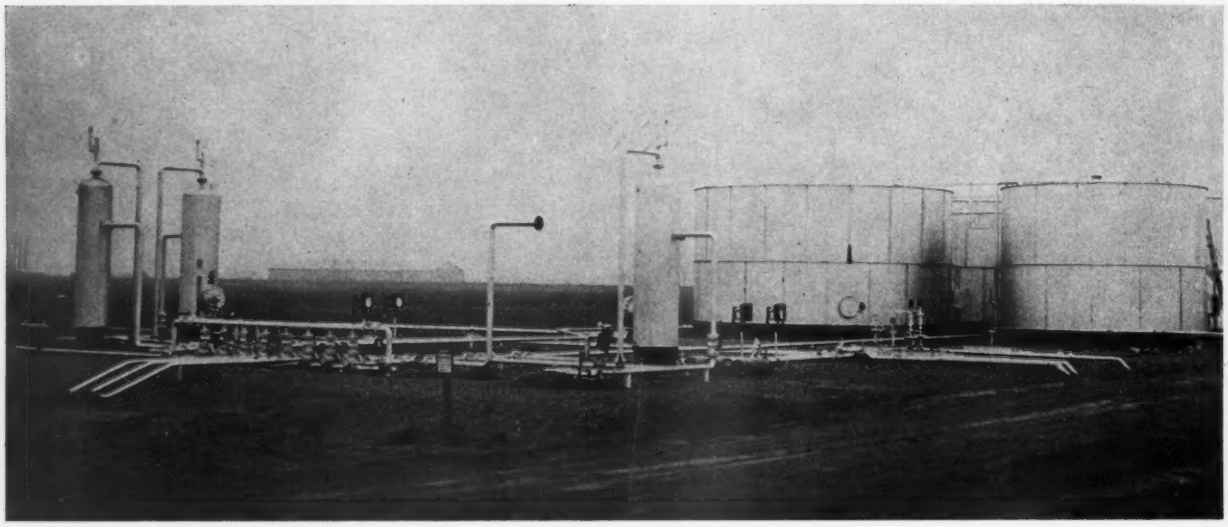
February 11, 1941

Telephone Number RIchmond 2136

Paloma Unitization Plan is Real Contribution

to Petroleum Conservation in State

The unitization project which operators in the Paloma field have undertaken with a view to the construction of a cycling plant represents an important contribution to the advance of true oil and gas conservation in the State of California. If successful, this project will result in greatly increased ultimate oil recovery and complete gas utilization, with corresponding benefits to everyone concerned. This venture is the first of its type in California, although the methods have been in successful operation for over three years in fields in Texas and Louisiana. It is thought that the Paloma field, so far as it has been defined to date, is like many of the Texas and Louisiana fields and does not



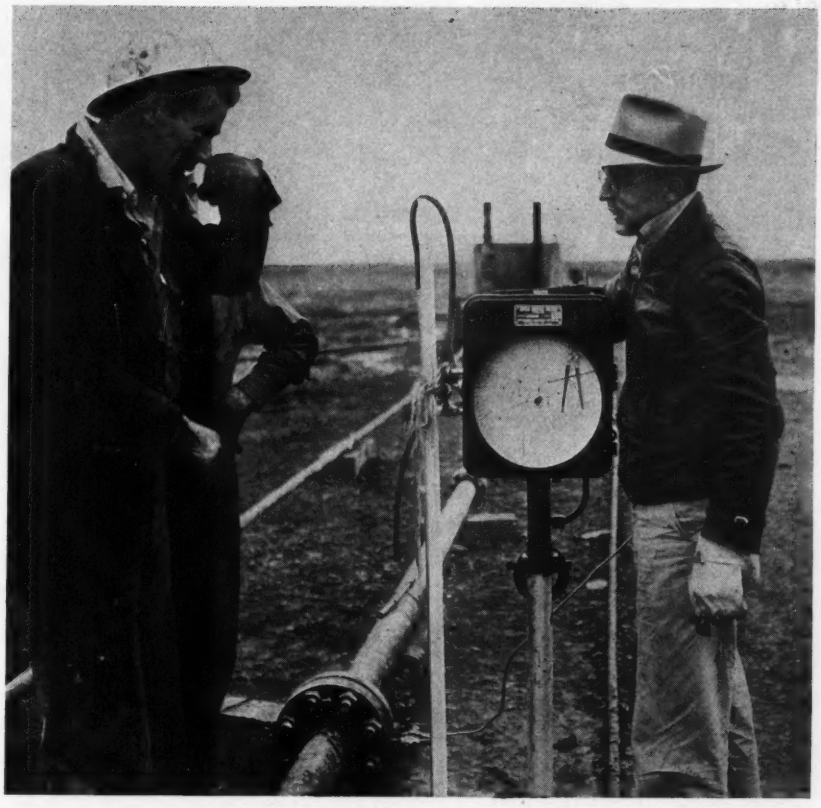
This is the type of high pressure equipment developed to control the 4600-lb. energy of Paloma wells.

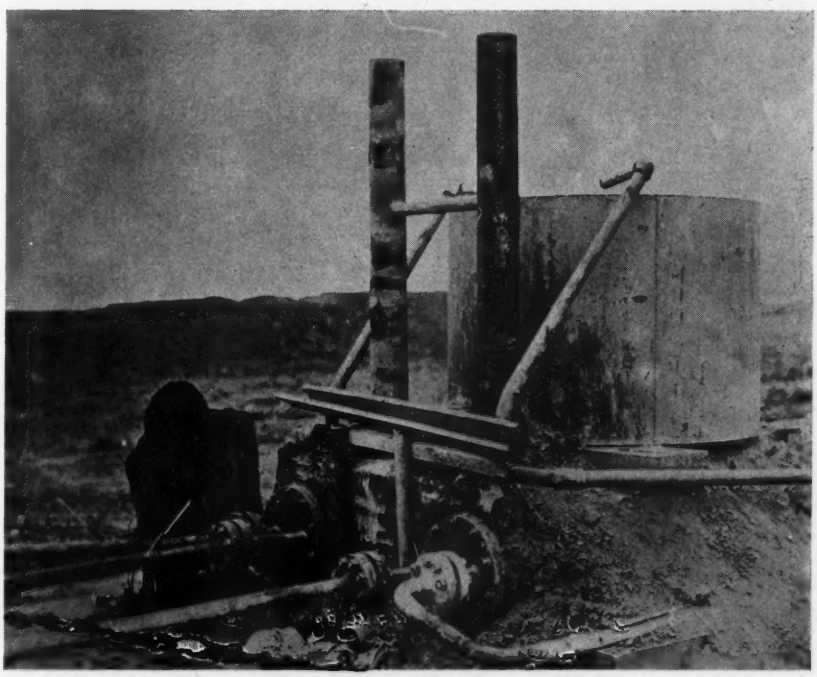
have any liquids in the sand, all of the reservoir contents being a uniform gas.

Simply defined, cycling consists of taking gas from the reservoir under high pressures through output wells, extracting the condensate from the gas in high pressure extraction plants and compressing the gas and returning it to the same formation through input wells. The dry gas which is returned to the sand acts more or less as a piston which drives the condensate bearing gas to the various output wells. In addition, the returning dry gas maintains the reservoir pressure and so prevents the liquid in the "wet" gas from condensing in the reservoir and being irretrievably lost.

Condensation of part of a gas to liquid in high pressure reservoirs due to pressure decline is called "retrograde condensation." The mechanics of this condensation process have been in part known to the scientific world for over fifty years; but the true application to oil production problems was first demonstrated and described by Doctors Sage and Lacey, of California Institute of Technology, in 1932. The term "retrograde" is applied to this condensation because it is a reversal of the process that engineers would normally anticipate, the normal anticipation being that condensation occurs upon increase and not upon decrease in pressure.

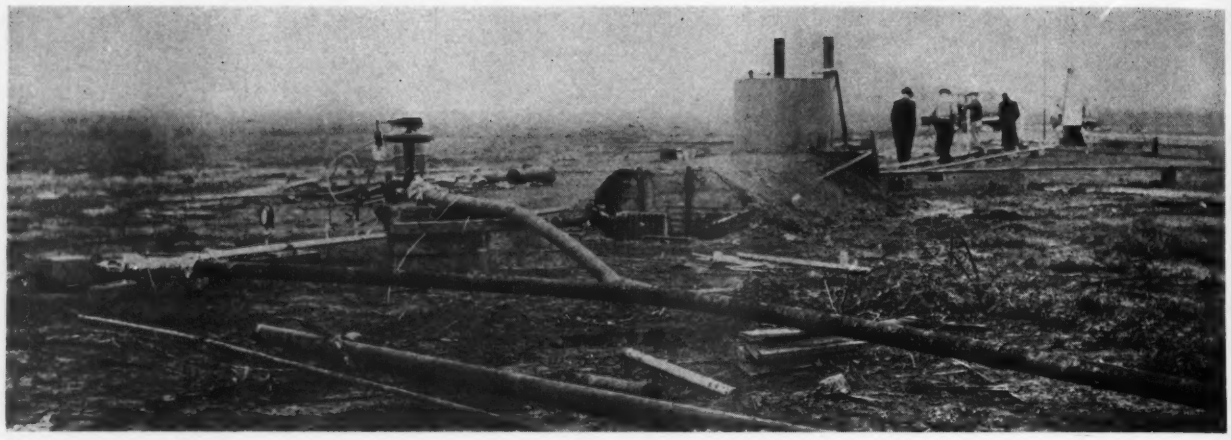
In effect, the purpose of cycling the dry gas is to permit recovery of the major portion of the so-called distillate or condensate without substantially lowering the reservoir pressure. After this operation is accomplished, there will remain a dry gas field which will have a value as fuel. The term "recycling" has come into more or less general use to describe these operations, but its usage implies continual circulation of the same volumes of dry gas through the formation as though this circulation through the sand enriches the dry-gas time after time. Such is not the case, since in the ordinary course of events little or none of the same gas passes through the recovery plant a second time.



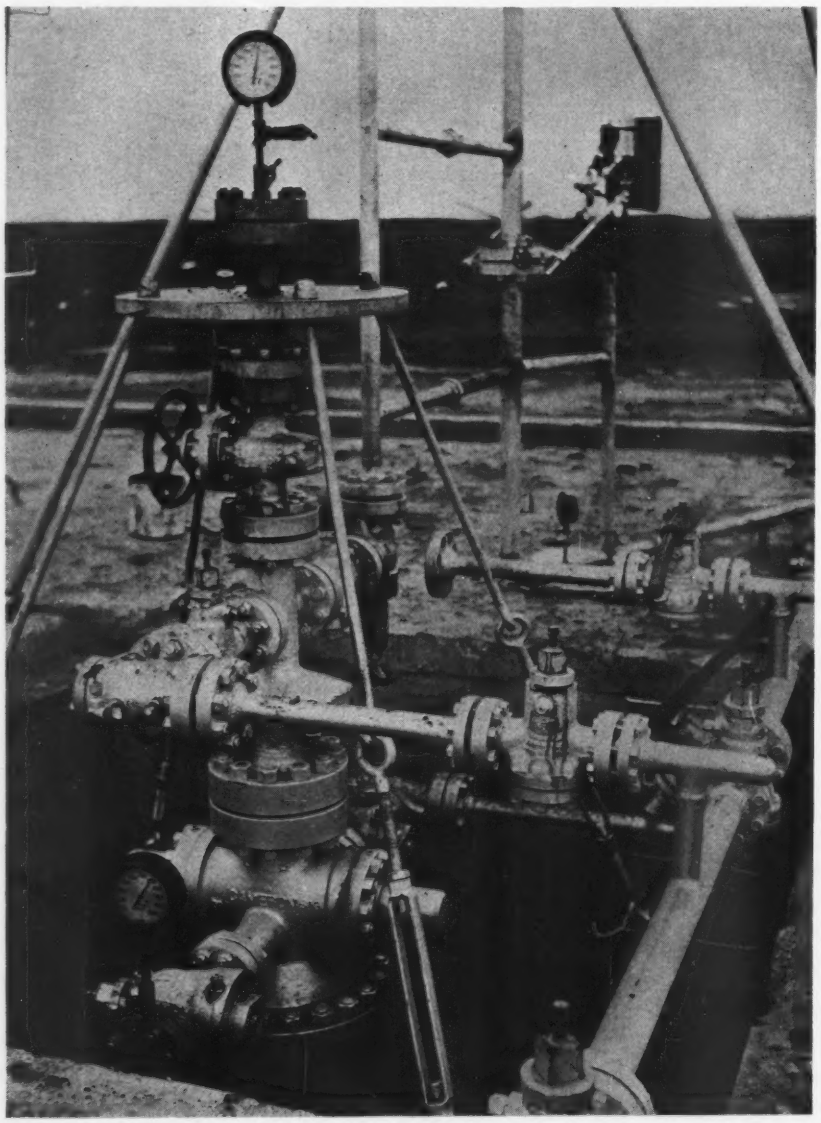


"Distillate field" experts turn a Paloma distillate producer into a laboratory.

Other oil field operations which are sometimes confused with cycling are those called "pressure maintenance" and "repressuring." As defined by usage both of these operations are confined to crude oil production. Pressure maintenance gen-



The furnace in background controls the temperature of the saturated gas. We counted more than a dozen thermometer wells.



When you are handling pressures such as are encountered in the Paloma field, only the sturdiest equipment and sound design are indicated.

erally describes the operation of separating gas from flowing oil wells and compressing the gas and returning it to the oil sand to prolong the flowing life of the wells and to retard the movement of water into the wells. Repressuring, as the name implies, is an operation to inject gas and build up the pressure in an oil sand and to drive the oil out of more or less stagnant traps. In a general sense pressure maintenance is an operation instituted shortly after the discovery and drilling of an oil pool, whereas repressuring is an operation commenced after part or all of the wells in the pool have ceased to flow naturally.

Condensate or distillate bearing gases (the names are synonymous by usage) are not new in California, but Paloma is the first field in which the operators have judged it practical to proceed with discussions of a unitized cycling operation.

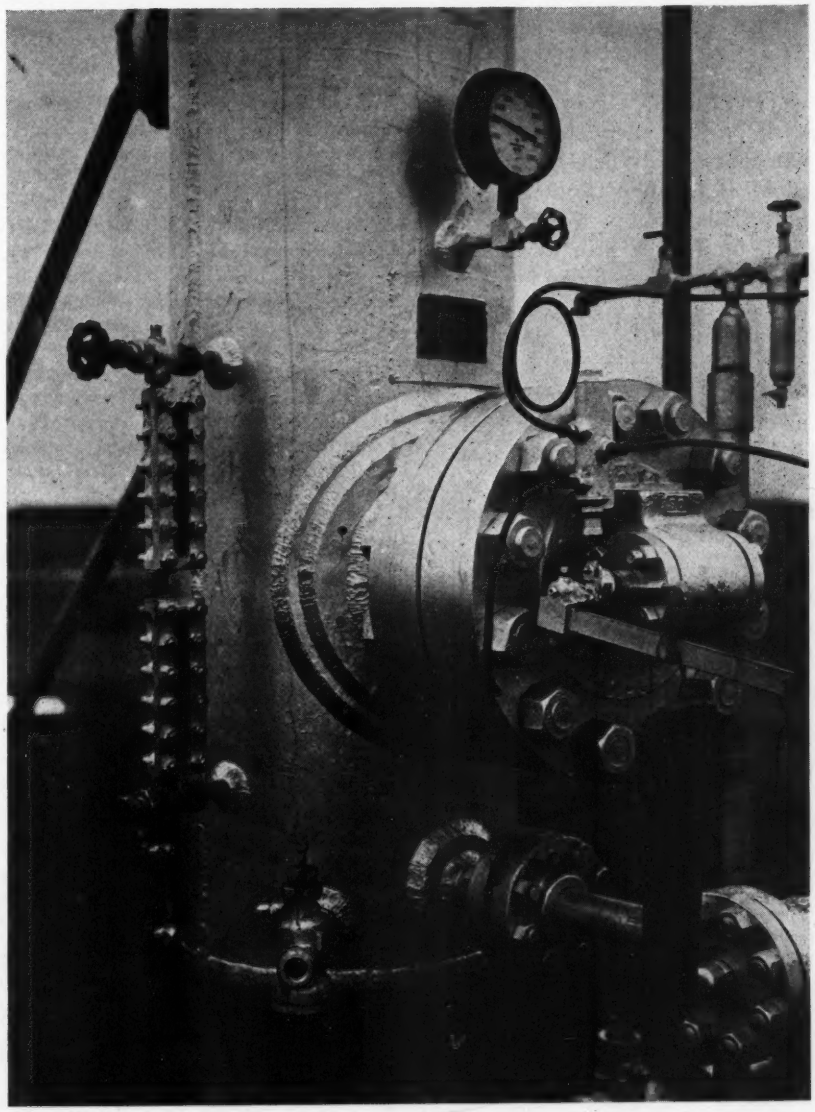
Historically the business of cycling has less than ten years background. E. V. Foran of the present firm of Foran, Boatright and Dixon, commenced experimental work on the problem in 1932 in the Big Lake field in West Texas. His work culminated in the first commercial operation, at Agua Dulce, Texas, in 1936. This first plant was closely followed by others until in 1938 this method of production became the accepted practice for condensate recovery. At present there are about 31 plants in operation in Texas with

It looks complicated, but the gauges, pressure recorders, regulators, thermometers, etc., reveal optimum operating conditions.

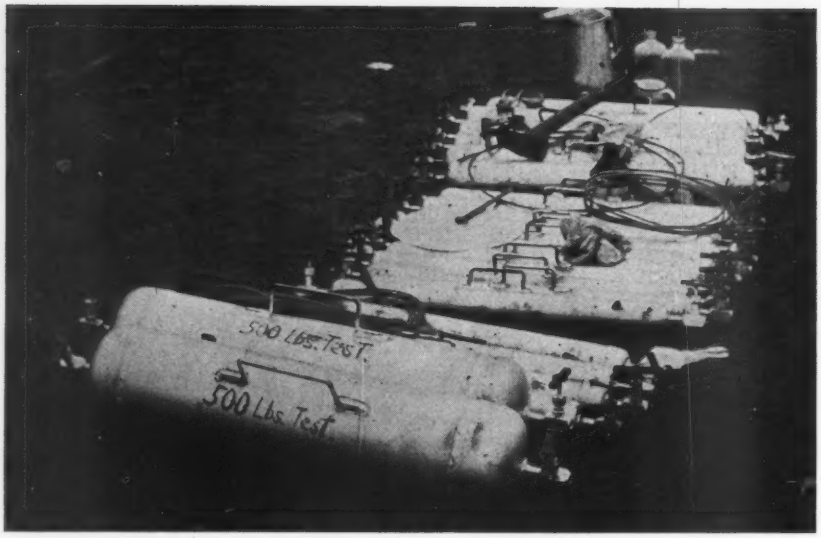
a daily gas processing capacity of approximately 1,240,000,000 cu. ft. per day. Two plants now under construction, one in Texas and one in Louisiana, are designed for a capacity of approximately 200,000,000 cu. ft. per day each. The total investment in plants and wells serving the plants in these two states is estimated to be approximately $40,000,000.

Preliminary test work at Paloma has indicated that cycling will increase the probable recovery of oil several times over that which might be anticipated by conventional production practices. Test work is continuing now in the field to gather information from which it will be possible to determine the practicality of operations. Specifically it is expected that the investigations now being conducted by the consulting petroleum engineering firm of Foran, Boatright and Dixon, of Houston, will result in an equitable and acceptable plan of field unitization, and a recommendation as to future field development and overall operations. It is anticipated, on the basis of present knowledge, that in the event a cycling plant is constructed at Paloma it will process the gas at approximately 2000# and compress the return gas to approximately 4000# for injection into the sand.

To bring about true conservation in the field, the oil companies, land owners, and royalty owners must cooperate in the development of the



This high pressure trap works like a charm. The close up view shows the rugged construction required to handle the tremendous energy of the field.



The experts must draw many samples under varying conditions to get the full story of retrograde condensation phenomenon in Paloma field.

field; and to do this economically it is proposed under the unitization plan that a centralized authority be established to operate the field as a unit. This will involve many problems, for it is a plan of extensive scope, but the benefits to be derived far outweigh any obstacles that may be encountered.

From the standpoint of the land owner and royalty owner, if a unit is formed each one within the included area will start participating in proportion to his holdings as soon as the unit is in operation, regardless of whether a well is drilled on his acreage or not. His interest will remain as long as production is obtained in any part of the unitized area. This will also be true in the case of the lease owner or operator.

Western Gulf Oil Co. Extends Paloma Field

Productive limits of the Paloma field were moved a mile to the southeast when Western Gulf Oil Co.'s KCL No. B-12-12 flowed more than a 500-bbl. rate of condensate and 3,930,000 cu. ft. of gas on a formation test to bottom at 10,534 ft.

Located near the northwest corner of sec. 12,32-26, the well cored almost solid oil sand from 10,248 to 10,427 ft. with streaks of gassy sand and shale to bottom. The saturated zone has been the subject of debate as to its exact position in the geologic column, a condition as yet not clarified. First thought to be a buttress sand overlying the normal Paloma sand, or Stevens equivalent, the present performance may discredit this theory since the gas-oil ratio, distillation curves, and gravity of the oil recovery are in most respects similar to those of the main body of the field. Western Gulf is preparing to core ahead in an effort to definitely identify the zone and determine its thickness. Micro-Fauna scarcity has in a large measure held up definite classification of the sands.

The formation test to bottom was made with the tester packer set 20 ft. above the shoe of the water string cemented at 10,230 ft. With a 975 ft. water cushion, fluid rose to the surface in 25 minutes, gas came in 28 minutes with a strong steady blow after 29 minutes. Recovery was 52.2 gravity condensate at a 572 bbl. per day rate through a 24/64 in bottom hole bean and a 16/64 in. surface bean under 2750 pounds flow pressure. Gas yield was at the rate of 3,930,000 cu. ft. a day.

The knowledge gained here is one more point to be assimilated in the general fund being assembled by those interested in instituting a unitization and conservation plan for control of this field. While everyone agrees with the principles of such administration, some qualified opinions are that the sand bodies are too tight to permit the successful results obtained in the Mid-Continent areas where the permeability ratings are much more favorable than those of the California fields.

Endeavoring to push Paloma limits a modest quarter of a mile westerly, Ohio Oil Co.'s KCL-A No. 9-83-4 is coring at 10,340 ft. near the east line of sec. 4,32-26. Last reported in shale, the well encountered oil sand at 10,001 ft., 63 ft. lower than the company's own westerly flank well KCL-B No. 3-23-3. The intervening zone to present bottom is reported to be largely light amber colored oil sand.

Vic Wilhelm Leaves For New York AIMME

Victor H. Wilhelm of The Texas Co., chairman of the Southern Calif. Section of the A. I. M. M. E., is leaving Feb. 14, for New York City to attend the national meeting of the A. I. M. M. E. at which time he will read his annual paper, "Developments in California Oil Industry During 1940", his annual contribution to this national meeting.

The national meeting of the A. I. M. M. E., will take place Feb. 17-20 inclusive at which time international topics will be discussed. Delegates and visitors from all over the world will be in attendance.

Neilsen Purchases Alford Pump Co.

Neilsen Pump Co. has purchased the entire sub-surface pump business of the Alford Pump Co. This purchase includes the sole and exclusive right to the use of I. R. Metal in the sales and service of sub-surface oil well rod and tubing pumps in the State of California.

By adding I. R. Metal plungers and liners, plus super-finishing, to Nielsen "Stream Line Flow" cages and fittings, an oil well pump combination is obtained which the makers say is superior to anything available elsewhere.

Service also is improved by greater field coverage in both sales and deliveries.

Neilsen Pump Co., with headquarters at 3204 Cherry Ave., Long Beach, has branch plants at Taft, Bakersfield, Ventura and Santa Maria.

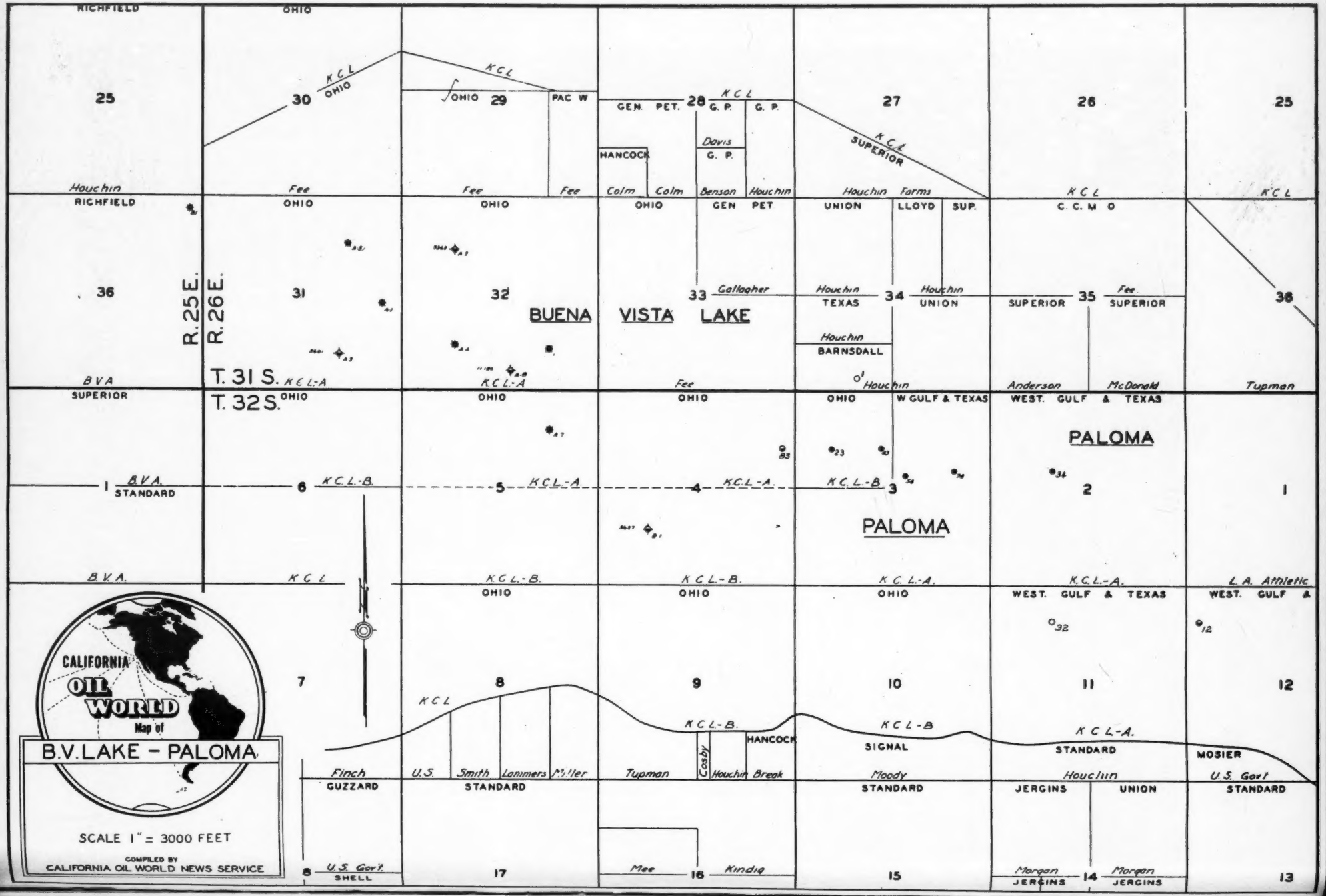
Hudson C. Drake Appointed Belridge Purchasing Agent

Hudson C. Drake has been appointed purchasing agent of Belridge Oil Co., Rodeo Land & Water Co., M. H. Whittier Co., Ltd., and Midway Peerless Oil Co., it was announced Feb. 1.

Mr. Drake, who has been assistant purchasing agent, succeeds W. C. Wickersham, retired.

Technologists are working on a gadget that will measure the density of diesel-engine exhaust smoke in order to gauge the suitability of the oil and the condition of the engine.

Plastics may be used in making shells and other ordnance in order to release metals and machine tools for other phases of the defense program.


RICHFIELD
OHIO
25
30
29
28
27
26
25
KCL
OHIO
PAC W
GEN. PET.
G. P.
HANCOCK
Davis
SUPERIOR
Houchin
Fee
Colm
Benson
Houchin
Houchin
Farms
KCL
KCL
RICHFIELD
OHIO
OHIO
OHIO
GEN
PET
UNION
LLOYD
SUP.
C. C. M O
KCL
36
31
32
33
34
35
36
R.25E.
R.26E.
BUENA VISTA LAKE
Gallagher
Houchin
TEXAS
Houchin
UNION
SUPERIOR
Fee
SUPERIOR
BVA
T. 31 S.
KCL-A
Fee
Houchin
BARNSDALL
Houchin
Anderson
McDonald
Tupman
SUPERIOR
T. 32 S.
OHIO
OHIO
OHIO
OHIO
W GULF & TEXAS
WEST. GULF & TEXAS
PALOMA
1
6
5
4
3
2
1
BVA
STANDARD
KCL-B.
KCL-A.
KCL-A.
KCL-B
PALOMA
B.V.A.
KCL
KCL-B.
KCL-B.
KCL-A.
KCL-A.
L.A. Athletic
OHIO
OHIO
OHIO
WEST. GULF & TEXAS
WEST. GULF &
7
8
9
10
11
12
KCL
KCL-B.
KCL-B
KCL-A.
HANCOCK
SIGNAL
STANDARD
MOSIER
Finch
U.S.
Smith
Lanimers
Miller
Tupman
Cosby
Houchin
Break
Moody
Houchiin
U.S. Gov't
GUZZARD
STANDARD
STANDARD
JERGINS
UNION
STANDARD
8
17
16
15
14
13
U.S. Gov't
SHELL
Mee
Kindig
Morgan
JERGINS
Morgan
JERGINS
CALIFORNIA
OIL
WORLD
Map of
B.V.LAKE – PALOMA
SCALE 1" = 3000 FEET
COMPILED BY
CALIFORNIA OIL WORLD NEWS SERVICE

Refinery Modernization and Expansion

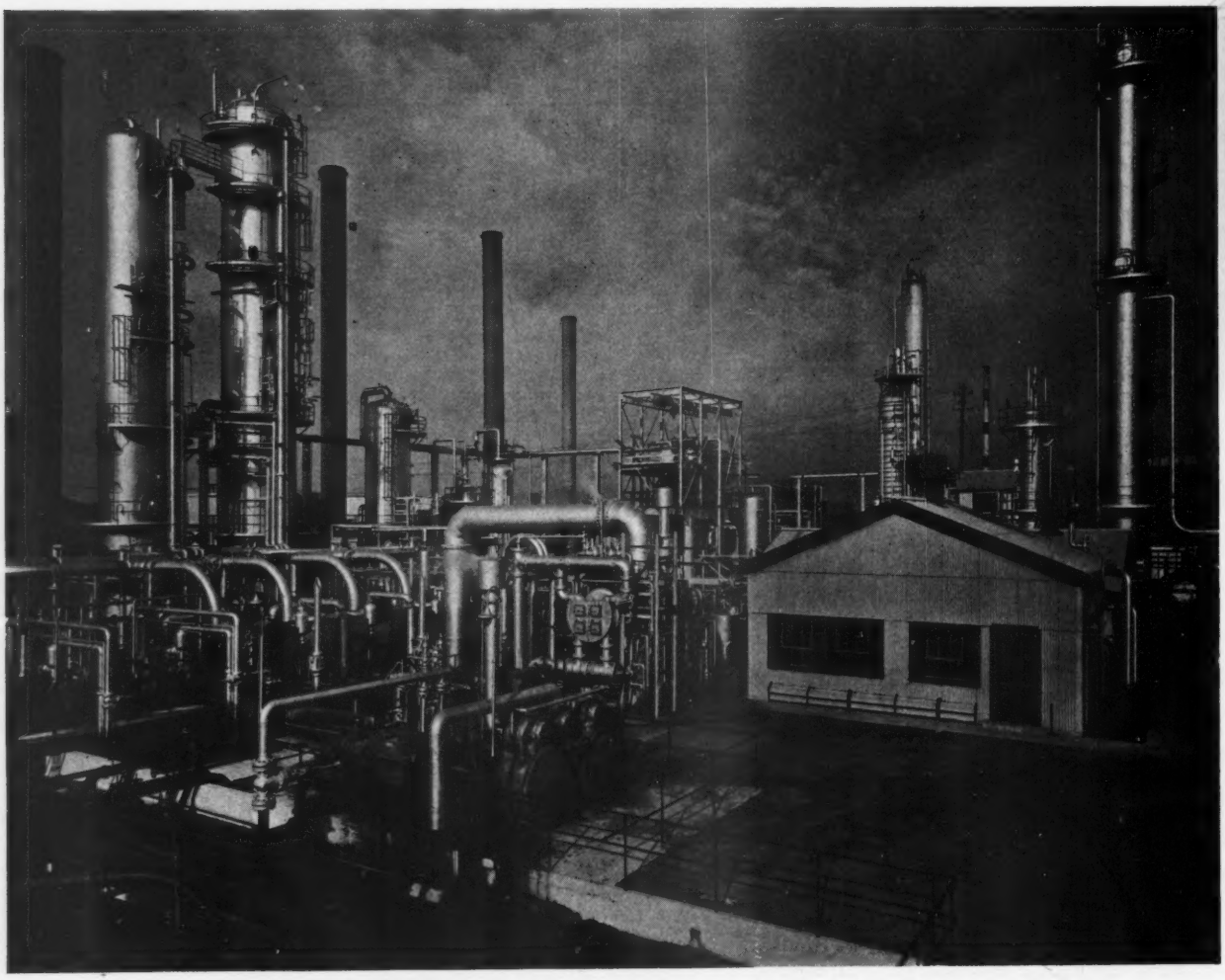
Contributes to National Defense

An unprecedented increase in California refinery and natural gasoline plant construction and modernization in 1941 is indicated in a survey of projects nearing completion, in plans which have not reached a stage suitable for public announcement, and in an appraisal of the supply position which the refining and natural gasoline manufacturing industries will take in the national defense program.

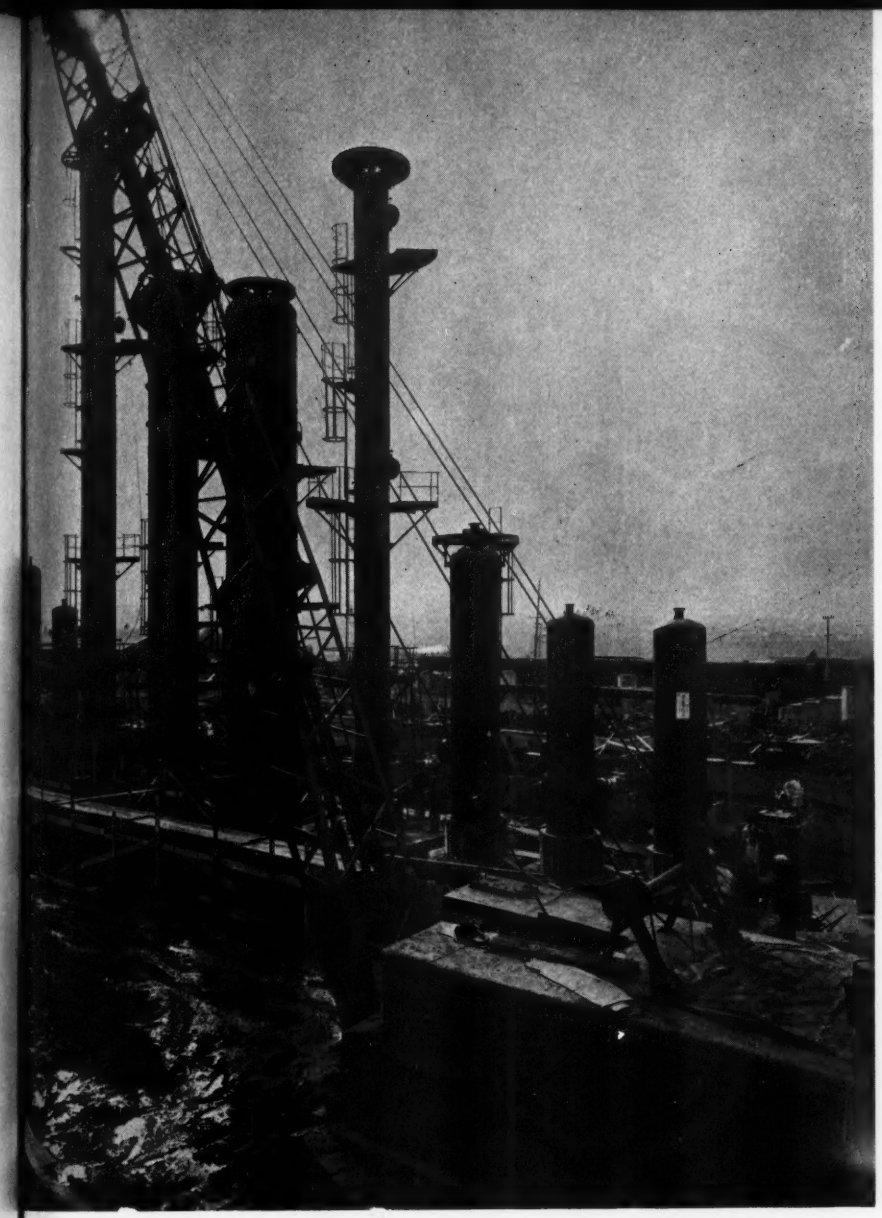
Without bottlenecks in any of its branches of production, transportation, refining and distribution, the petroleum industry has been singularly free of the obstructions which hamper major and minor industries in revolutionizing their operations to meet emergencies which are national and international in scope. Without delay, and without receiving guarantees of subsidy and contracts from the government, the petroleum industry has geared its operations to the requirements of the nation's defense program.

As early as the beginning of February it is estimated that refinery and natural gasoline plant modernization schedules to be completed in 1941, represent an investment exceeding $9,000,000. All of these new constructions are designed for the production of high octane materials to be used in the manufacture of aviation motor fuels required by the latest types of high speed, high compression engines.

Because of their relatively small capacity, super aviation fuel plants completed in California before the close of 1940 may be considered in the light of pioneering effort. Future construction will probably follow the lines of the larger plants which are now nearing completion. It is thought by observers that the companies operating the smaller installations will announce expansion



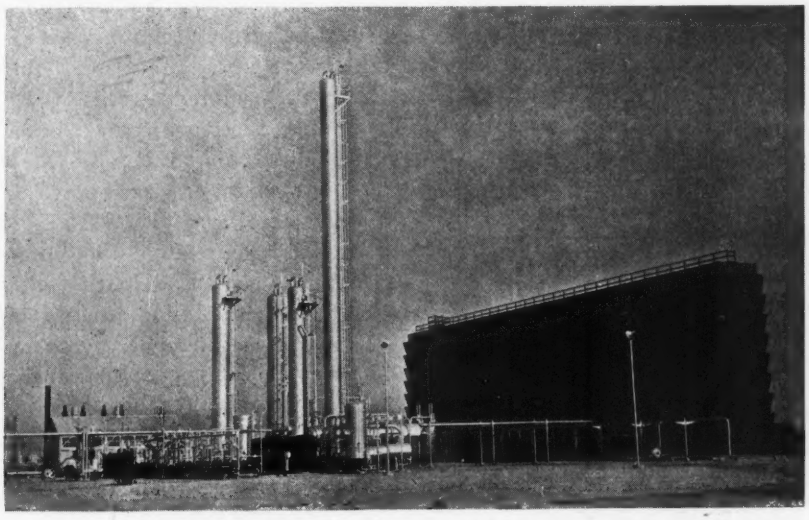
Panoramic view of Union Oil Company's cracking unit at the Oleum Refinery.



Construction shot of the new hydro-forming and coking units being built by Union Oil Company at the Oleum Refinery.

of these facilities before many months.

Plants now operating and producing materials of 94 octane without addition of tetraethyl lead, are: Richfield Oil Corp., Watson, 350 bbls. daily capacity; Standard Oil Co. of California, El Segundo, 750 bbls. daily capacity; Tide Water Associated Oil Co., Avon, 500 bbls. daily capacity; Union Oil Co., Wilmington, 270 bbls. daily capacity; Shell Oil Co., Inc., Martinez, 500 bbls. daily capacity, and Shell Oil Co., Inc., Dominguez, 800 bbls. daily capacity. Latest to be put on stream is Standard Oil Co. of California's 1200-bbls. daily capacity plant at Richmond.



General view of Richfield Oil Corp.'s new Coles Levee Absorption Plant.

All of these plants are of the type known as sulphuric acid alkylation plants. In the Second Issue, November, 1940, of California Oil World, S. H. McAllister, of Shell Development Co., gave the following clear exposition of the alkylation reaction:

"At the present time there are two successful commercial applications of the alkylation reaction. These are: (1) the catalytic sulphuric acid alkylation process developed by the Anglo-Iranian Oil Co., Humble Oil Co., Standard of New Jersey, Shell and Texas, and (2) the thermal alkylation process of Phillips (Petroleum Co.). Other catalytic processes involving aluminum chloride complex salts show promise but have not yet proved commercially applicable.

"The sulphuric acid alkylation process has been very well received by the industry and already is supplying large quantities of 100 octane aviation gasoline . . . While the actual design of some of these plants may differ in detail, in principle they are fundamentally the same. The olefin (usually C_4 fraction) is premixed with an excess of isobutane and then is fed to an emulsion of acid and reacted hydrocarbon which is rich in iso-paraffin but substantially olefin-free. In this way a large excess of isoparaffin is always pres-

ent in the reaction zone and polymerization or hydropolymerization of the olefins is suppressed.

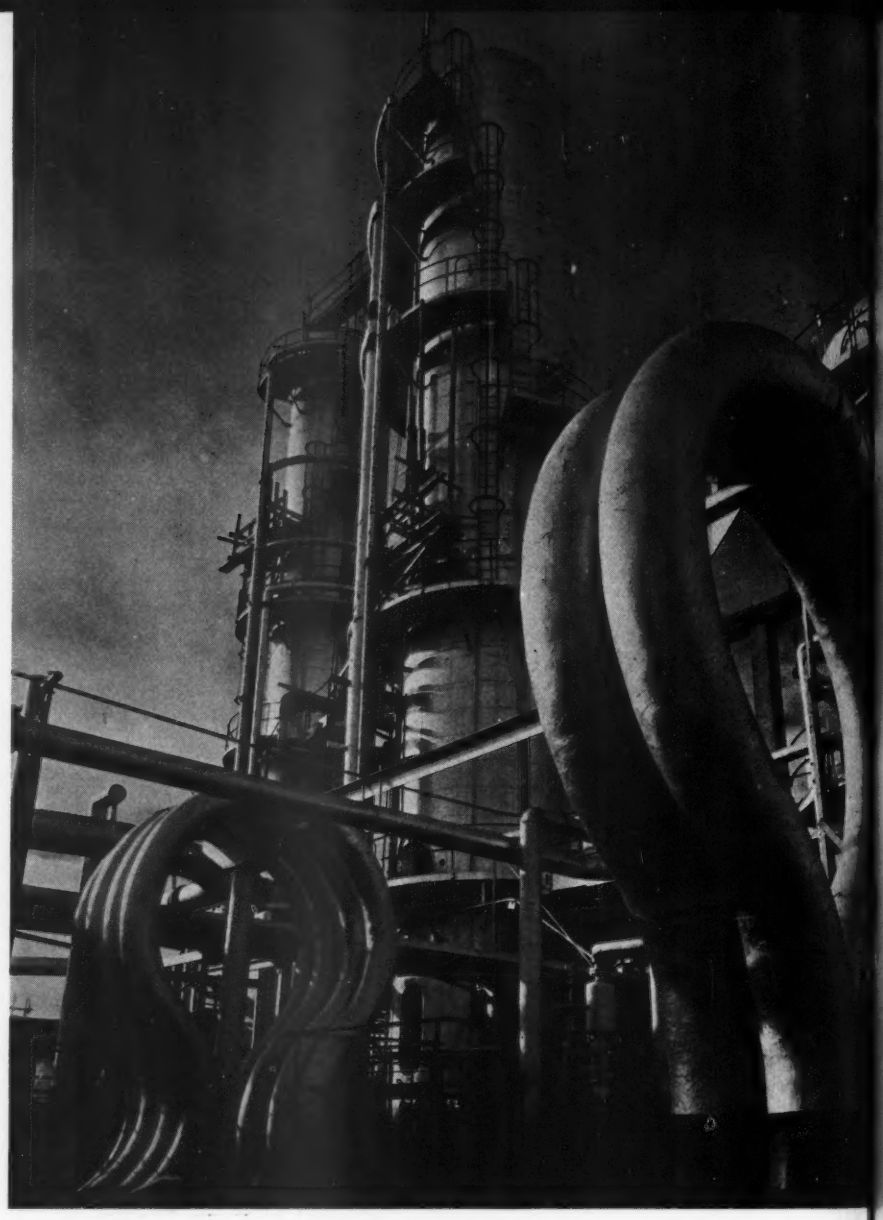
"The actual reaction taking place is rather complicated and involves hydrogen transfer, isomerization and carbon to carbon cleavage, as well as alkylation, but a saturated product of high octane number is obtained in a single step . . . The reacted hydrocarbon is separated from the acid, washed with caustic and stabilized. The excess isobutane is then separated from the n-butane and returned to meet the fresh olefin feed.

"A major advantage of the sulphuric acid alkylation process is the great range of possible feed stocks . . . The actual operation of a plant is quite simple and with automatic control instruments, little attention is required. Furthermore, at present the cost of the actual equipment included in the flow diagram (shown here) is considerably lower than previously published figures."

Earlier processes for the production of 90 octane or better unleaded stocks involve polymerization and hydrogenation operations, and these are continually undergoing improvement and wider applications. These processes are: hot acid polymerization; U.O.P. polymerization; Polyco polymerization; liquid phase phosphoric acid polymerization, and related processes such as hydrogenation and dehydrogenation.

The polymerization process developed by Universal Oil Products Co., is probably the most widely used in California. The catalyst is prosphoric acid impregnated into a carrier and is capable of polymerizing propylene and ethylene as well as butylenes. Hydrogenated products of 96 octane or better is obtained when approximately equal quantities of butylene and isobutylene are reacted. The U.O.P. catalyst can be partially regenerated by controlled oxidation with air followed by rehydration with steam. Eventually, however, the structure is impaired and the catalyst must be completely rebuilt.

Standard Oil Co. of California's liquid phase phosphoric acid polymerization process uses phosphoric acid as the catalyst, but as a liquid rather than impregnated in a carrier. The necessary contact is obtained by passing C.P. phosphoric acid over quartz or glazed porcelain filler in a tower at 150-160° C. at atmospheric or relatively low pressures. Standard Oil Co. of Ohio's Polyco polymerization process involves the use of copper pyrophosphate as the catalyst, and is capable of polymerizing butylenes and other olefins.

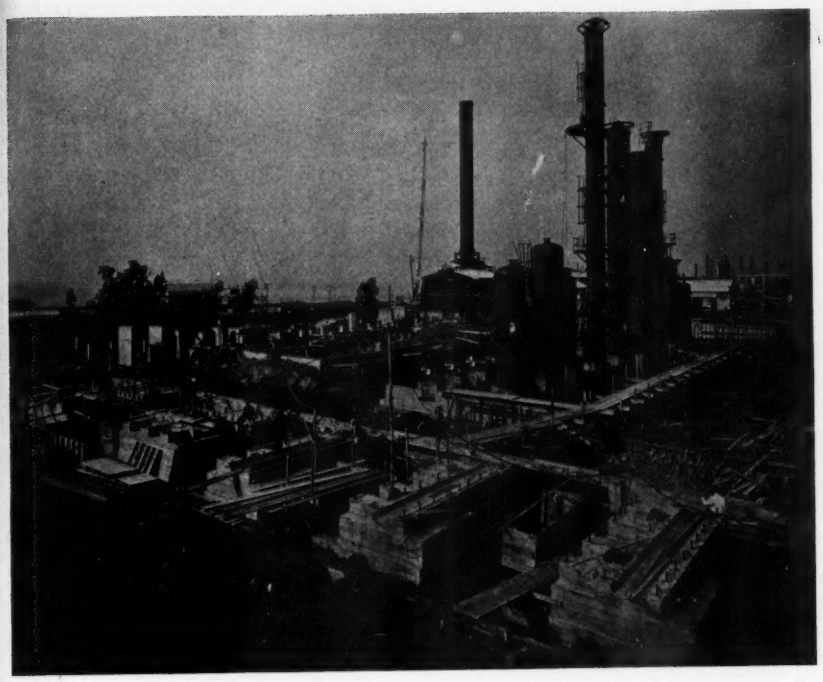


General view of Union Oil Company's cracking Unit at the Oleum Refinery. Fractionating columns in background.

While little information is available at this time on operating details of the large plant nearing completion at Union Oil Co.'s Oleum refinery, it is expected that this plant will represent a new forward step in processes for the production of super octane fuels.

Expected to be in operation by March 1, is the million-dollar fighting grade aviation gasoline plant of The Texas Co., in Los Angeles Harbor district. The company's announcement follows:

To produce this high-octane fuel at the rate of ten million gallons a year, Texaco will make use of a process known as "alkylation," a new method of obtaining the gasoline demanded by today's high-compression engines. This process has



General construction shot of the hydro-forming and coking units being built at Union Oil Company's Oleum Refinery. Construction on these units was started Sept., 1940

the further advantage of economizing on petroleum reserves, as it utilizes certain waste petroleum fractions which have hitherto escaped as burned gases in the refining process . . . When the new unit is completed, according to L. R. Holmes, vice president in charge of refining, the company expects it to be the most up-to-date refining unit of its kind on the Pacific Coast.

The unit will have a daily capacity of 13,600 gallons of the alkylate concentrate. From this concentrate, with further processing and blending, it is possible to provide ten million gallons of the "fighting grade" gasoline a year. This is enough fuel to keep a fleet of 102 attack bombers in the air for 500 hours. Fuel of this high octane rating not only gives fighting planes and bombers increased speed, but also provides them with greater climbing power and increased bomb carrying capacity as compared with gasolines formerly used.

A short distance from the Rosecrans field Douglas Oil & Refining Co.'s aviation gasoline refinery has completed foundation work and time is nearing for the erection of stacks, towers, reaction chambers and pipe furnaces.

Richfield Builds Absorption Plant at Richfield Western

Richfield Oil Corporation recently placed in operation its new high-pressure natural gasoline absorption plant in the Richfield Western Field, east of Elk Hills. The plant was designed by Richfield engineers, under the supervision of H. R. Linhoff, manager of Richfield's gas department, and constructed by C. F. Braun & Co. of Alhambra, Calif. Designed as a two unit plant, each unit having a capacity of 40,000,000 cu. ft. of gas per day at 450 lbs. per sq. in., with a recovery of 20,000 gallons of 22 lb. Reid vapor pressure natural gasoline, the first unit, with one-half its normal absorber capacity, was completed and placed in operation early in October, 1940. An additional absorber is now being installed to complete the first unit which will then have a capacity of 40,000,000 cu. ft. per day.

Among the many features not common to other high-pressure absorption plants in California is a special direct-fired oil heater; combination high-pressure and low-pressure distillation circuit; a novel absorption oil reclaimer unit; and an oil-heated stabilizer reboiler. Liberal use is made of gas engine driven pumping units for cooling tower water, engine jacket water, high-pressure lean oil and fire protection. Gas engines are also used for instrument air and engine starting compressor services.

Unlike most other plants, all the venting operations are conducted at pressures of from 175 lbs. to 300 lbs. per sq. in., thereby permitting the vent gas from the fat oil vent tank and the non-condensed vapors from the high-pressure and low-pressure strippers to be recompressed in a single stage of compression from 175 lbs. to 450 lbs. per sq. in. for reabsorption. This, and the use of a direct fired heater and gas engines, has resulted in a considerable saving in compressor capacity as well as an excellent overall saving in plant fuel.

The plant is entirely automatic in operation and requires very little operating attention. Safety and emergency controls are found throughout the plant.

All gas processed in the plant enters the plant at absorber pressure. This is accomplished by compressing the low-pressure gas and tank vapors to a pressure equal to the normal pressure on the high-pressure gas gathering system by means of automatic booster compressors installed at the various trap farms throughout the field. This eliminates the necessity for more than one gas gathering system.

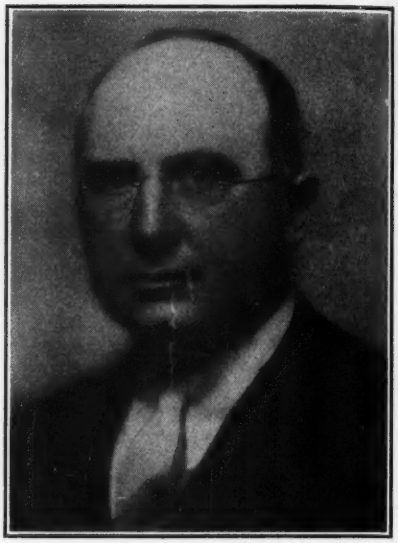
O. C. Field Purchases Pacific Central Refining

On January 23, 1941, the entire capital stock of the Pacific Central Refining Co. was purchased by the O. C. Field Gasoline Corp. with the exception of the stock of R. S. Peterson, who had built the plant for the original stockholders.

The plant supplements the asphalt and road oil plant at Casmalia, Calif.

(Continued on Page 15)

Dana Hogan States True Position of California Petroleum Producers



Dana Hogan

In the January 4, 1941 issue of the Saturday Evening Post, an article appeared entitled "Oil War Over Here," by Ruth Sheldon. On January 8, Dana Hogan, president of the San Joaquin Valley Oil Producers Association, wrote the editor of the Post in refutation of certain parts of this article which concerned California's oil industry.

Mr. Wesley Winans Stout, Editor
The Saturday Evening Post,
Independence Square,
Philadelphia, Pa.

"Dear Sir:

"It is a shame and pity that Ruth Sheldon's otherwise splendid article entitled "Oil War Over Here" in your January 4 issue, was not checked carefully in respect to the following glaring misstatements regarding California:

(a) 'Although no testifying Government officials offered proof of great waste, or proposed to handle conservation by methods other than those already developed and used by the majority of the industry, they rightfully made great capital of two glaring examples of the need for regulation—Illinois and California. Oil men can only hang their heads when these two states are mentioned.

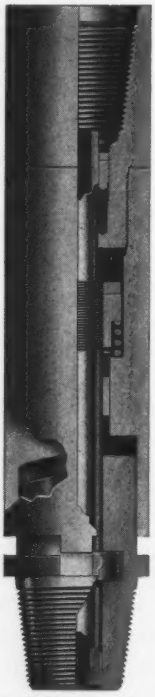
(b) 'These two states (California and Illinois) indulge in the industry's disreputable early-day practices.

(c) 'Major companies which practice and support conservation in other states hypocritically produce to the utmost in Illinois and California.'

"I am an independent California oil producer, being president of the Hogan Petroleum Company, and in addition to heading the organization on whose stationery this is being written (San Joaquin Valley Oil Producers Association), I am also a director of the California Oil and Gas Association, the Independent Petroleum Association of America, and the American Petroleum Institute. I was the chairman of the Allocation Committee of California's voluntary proration association, the Central Committee of California Oil Producers now called the Conservation Committee of California Oil Producers, when it was revived after the N.R.A. was declared unconstitutional. I testified at length before the Cole Committee when it had its hearings in California last January, and I accompanied the members of the committee on their trip through California.

"Regarding (a): In a careful examination of the testimony by Government

WHAT'S UP?



THE BOWEN BOX SPEAR is the tool you want for a quick, positive catch when tool joint box or coupling is up on a tight-hole fishing job. This rugged tool takes an inside grip on the box . . . lets you pull up, and back-off easily **and safely—using any amount of torque or pull the run-in string will stand.**

A special cam device offsets the two halves of the slips, binding them in the box and making the joint back-off proof. Yet—to let go, simply lower the run-in string and rotate to the right. It's positive . . . **foolproof!**

You can get the Bowen Box Spear for all popular sizes and types of drill pipe, complete with slips to catch either tool joint box or coupling. It's simple to run . . . it's safe . . . it's instantly ready for the toughest job!

Write for full details—or consult your 1941 Composite Catalog!

TWENTY-FOUR HOUR SERVICE IN ALL ACTIVE CALIFORNIA FIELDS

S·R·BOWEN CO·
VALLEY FISHING TOOL CO.

Main Office—Santa Fe Springs California

Branches at:
Huntington Beach - Ventura - Bakersfield - Avenal - Santa Maria

Just Say---

YES! You may send me the CALIFORNIA OIL WORLD for one year, for which I enclose $1.00.

For Foreign Countries, $2.00

Name _____

Address _____

City _____ State _____

Position _____ Company _____

Check branch engaged in Producing..... Refining..... Natural Gasoline..... Marketing..... Manufacturing

Subscriptions accepted only from persons actively connected with the oil industry.

California Oil World, Petroleum Bldg., Los Angeles

officials before the Cole Committee in November, 1939, no one, outside of uninformed Secretary Ickes, made capital of the need of regulation in California. All the members of the Cole Committee told me before they left California that they were agreeably impressed by the splendid voluntary proration system in California, and some went to the extent of saying that they considered our voluntary system more effective and efficient than the systems in states having state regulation. Furthermore, I know of no oil man who "hangs his head" when California is mentioned. In fact the opposite is true. This was particularly true when at the annual meeting of the Independent Petroleum Association of America held in Dallas, Texas, last October, the California voluntary system was held up as an example of honest, efficient and effective proration, free from all political or corruptive influences.

"Regarding (b): California has always been looked to as the leader in adopting the most scientific and proficient methods of drilling for and producing oil in the world, with the minimum amount of wastage. Our state laws prevent the wastage of natural gas in the producing of oil, and injunctions are granted by courts in the cases of offenders. I doubt that a single instance of "disreputable early-day practice" will be found in California.

"Our Conservation Committee's official figures show that on January 1, 1941, the potential production of all the oil wells in California was 3,359,929 barrels a day. The average daily production from these wells during last month was only 607,192, representing only 18% of their potential. Although the U. S. Bureau of Mines' demand figure for this month is 592,500 barrels a day our Conservation Committee has set a January allotment figure of only 571,000 barrels a day. Preliminary figures show that in 1940 California's stocks of crude oil and its principal products were reduced 8,494,000 barrels. From the foregoing you can readily see that California is doing an excellent job of oil conservation and proration without the aid of politicians and public servants.

"Regarding Illinois, nature has curtailed production there and that state is not now able to produce within 35,000 barrels a day of the U. S. Bureau of Mines' demand figure.

"Regarding (c): I think this statement regarding the major oil companies is most unfair, unwarranted and unfounded. It is not my place to defend major oil company practices, but I will say that so far as California is concerned they have played the game fairly and squarely in the matter of proration and conservation, and in no instance can one find where they are 'producing to the utmost' except in small stripper wells of 20 barrels or less a day capacity which are allowed by the Conservation Committee's formula to produce their capacity to recover economically what oil may be left in the ground.

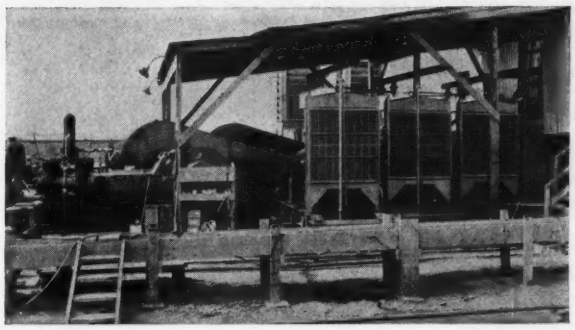
"The article very justly did not deal kindly with the Department of Interior's consuming desire to get its hands on the oil industry but the misstatements (a), (b), and (c) are just the thing the Federal officials will pick out of the article and quote.

"The oil industry needs all the help it can obtain to prevent unnecessary Federal control legislation. Every excuse Secretary Ickes has put forth for the necessity of Federal control has been proven flimsy but now he has gotten the President to beat the drum by fallaciously saying it is necessary for national defense. I enclose an excerpt from my testimony before the Cole Committee which shows by compiling figures supplied by Government witnesses that our sources for fuel oil and gasoline are enough for several thousand years.

"I hope your publication will continue to aid us in our fight and if possible correct your article before a Government official quotes it.

"Yours very truly,
DANA HOGAN, President,
San Joaquin Valley Oil Producers Association."

Bell & Loffland PROVE ITS ADVANTAGES in 10,000-ft. Drilling



NEW Super-Power *RIG* has WAUKESHA ENGINES...with fluid drive couplings

Drilling at Coles Levee, Bell & Loffland have already passed the 9000-ft. mark. Instead of the usual large heavy-duty steam rig, they are using a new super-power National Supply Co. rig.

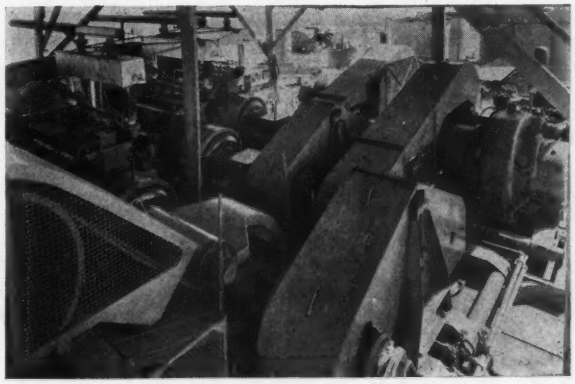
Its three Waukesha Model 6-LRO Engines burn natural gas and have a combined output of over 1100 hp. The sprocket ratios give the heavy-duty draw works a very selective and wide range of speed. A line pull of nearly 40,000 lb. is available at lowest speed. In high, the line speed may reach 3500 f.p.m. without overspeeding the engines.

The engines' power is transmitted to the mechanical equipment by American Blower Company's 30-inch fluid couplings built into the flywheels. These couplings prevent stalling or overloading under all conditions.

When drilling, one engine drives the rotary, the other two the pumps. In hoisting, the three engines are compounded.

Because of their high power, flexibility, durability and greatest overall economy on gas, gasoline or butane, Waukesha powered rigs are rapidly replacing steam—particularly in prospecting areas where water supply is uncertain. ***Write for Bulletin 840.***

WAUKESHA MOTOR COMPANY • WAUKESHA, WIS.
NEW YORK • TULSA • LOS ANGELES



THIS LAUGH OFF!!

George Trembley overheard this one at a recent tournament. One of the fellows whose worst vice is an occasional round of non-profit bridge was watching the divot diggers in action. Wishing to drive home a small moral lesson the kibitzer said mildly: "I notice that the players who get the lowest scores are not those who swear."

"Why the hell should they?" chorused the perspiring foursome.

Now that the AIMME is prepping for the annual session in New York, we are told that some of the experts in the nonferrous division can tell at a glance whether a platinum blonde is precious mineral or just common ore.

While we're in the groove for natural history we are reminded of the nearsighted gauger who had never seen an elephant. Peering over his glasses one evening he saw a pachyderm feasting in his garden and immediately broke all existing records in reaching a telephone. "Bring lots of policemen," he excitedly told the sergeant. "There's a huge monster in my garden pulling up my cabbages with its tail."

"That sounds crazy," the sergeant answered. "What's it doing with the cabbages?"

"You wouldn't believe me if I told you," the gauger muttered.

Up to the age of 16, a youth may be a Boy Scout, but from that time on, he is a Girl Scout, says **Kenny Cook.**

Leslie L. Lack tells this one: A seedy chap with a worried look entered the doctor's office.

"Doctor," he said, "you've got to help me. I swallowed a quarter 25 years ago."

"Good heavens, man," the doctor stared. "Why have you waited all those years? Why didn't you go to a doctor the day you swallowed it?"

"To tell the truth," the tramp answered, "I didn't need the money at the time."

Duke Thornburg recounts an interesting anecdote:

Fred—"Where have you been, George?"

George—"In a 'phone booth talking to my girl."

Fred—"Didn't take you long."

George—"No, drat it, someone wanted to use the telephone and we had to get out."

Worth a mild chuckle is that story we heard at the last C.N.G.A. meeting:

Very late one night two of the boys who had been imbibing too freely were sitting on the pavement curbing and one was heard to say to the other, "What does your wife shay when you shtay out late like thish?"

"Haven't got a wife," the other replied.

"Then why do you shtay out late like thish?"

And **M. Yarberry** told this one recently:

The young man walked boldly up to the elderly woman whom he had mistaken for the principal of the finishing school. "May I see Miss Bolton, please?" he asked.

"May I ask who you are?"

"Certainly. I am her brother."

"Well, well! I'm glad to meet you. I'm her mother."

J. H. Robinson tells about the woman motorist who drove into a garage and asked the mechanic:

"Can you fix this fender so my husband won't know it was bent?"

"No, lady," he replied, "but I can fix it so that in a few days you can ask him how he bent it."

Charley Chandler says he read recently that there is some fear that there will be a lot of loose women running around England now that the government has banned the further manufacture of corsets, brassieres and girdles in order to concentrate time and materials on war effort.

Why can't you play golf without using such terrible language? Just watch **Tom Taggart,** who keeps quiet even when he lands in the water hazard.

Yeah, you watch him for yourself. You'll notice he spits after every bad shot and the grass never grows there again.

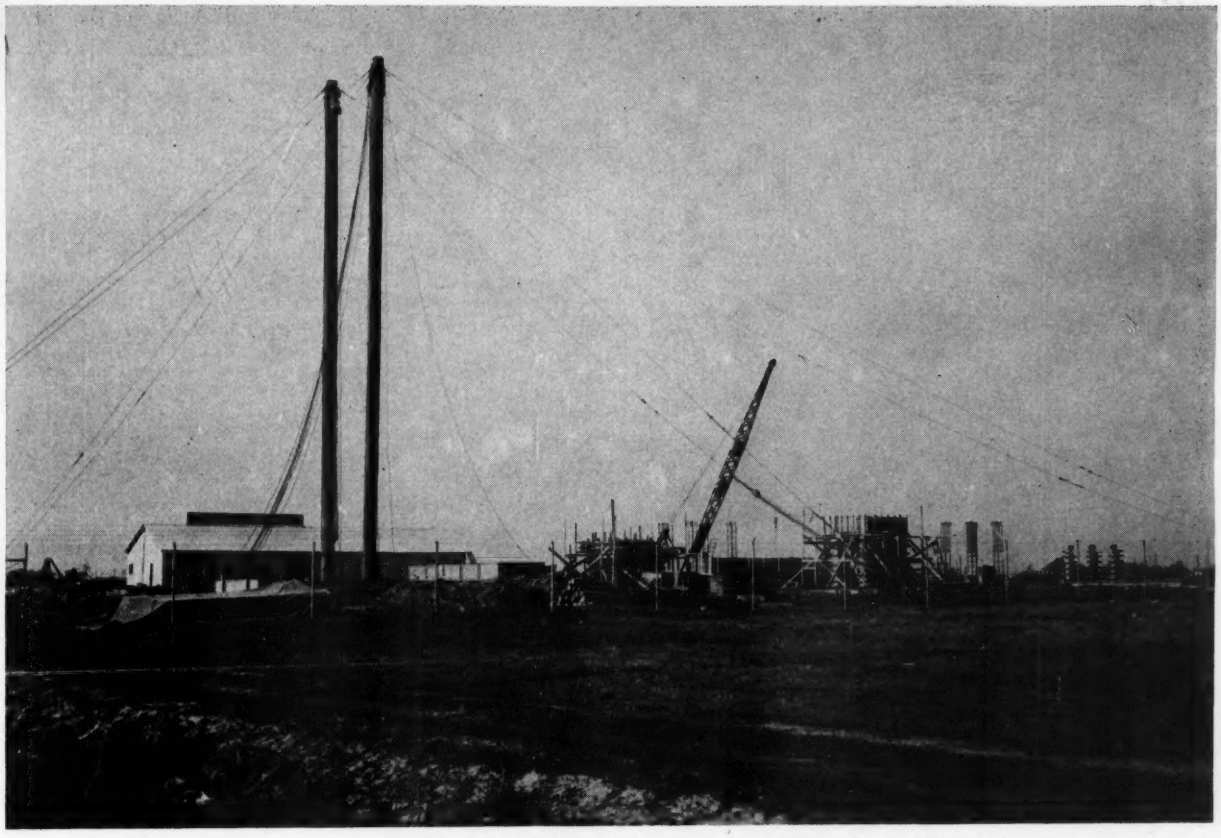
Harry Farquhar says that a diplomat is a man who can make his wife believe she would look fat in a fur coat.

Overheard at the Wildcat's rehearsal:

First She—Oh, Gilbert has the most powerful pair of binoculars!

Second She—Good, I dearly love these strong, virile men.

WEIGHT INDICATOR POINTS
GET YOUR FACTS BEFORE YOU!
You buy Weight Indicators, Mud Gauges, Torque Gauges and Tachometers for your drilling rigs to get the *facts* about drilling. Then . . . *why have them where they can't be seen?*
Get a Martin-Decker "Sealtite" and you'll have those instruments all together right square in front of the driller where he can see them—day or night, good weather or bad. There's no complicated installation procedure—no adjustments—no leaks. The "Sealtite" is *permanently* sealed up!
MARTIN-DECKER CORP., LONG BEACH, CALIF.



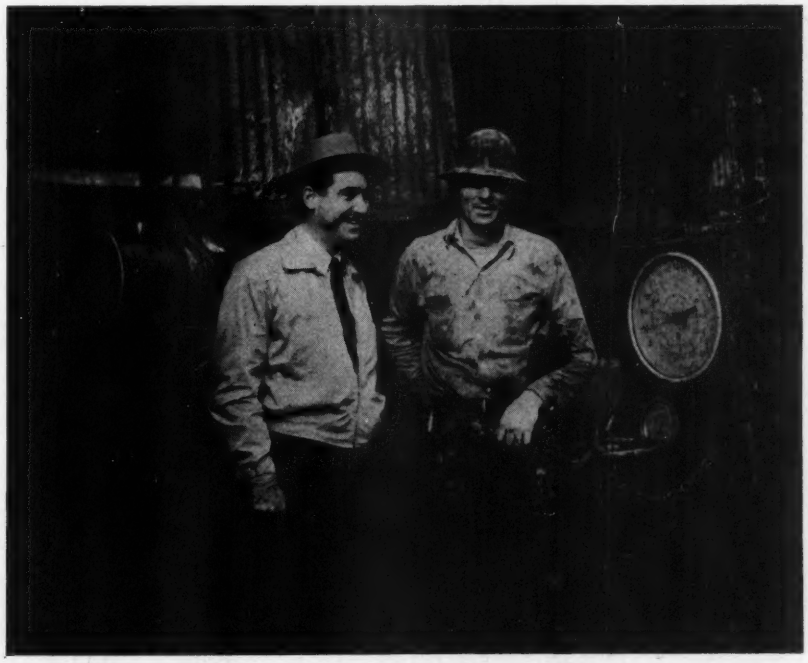
Between Main and Figueroa streets on East Road, Douglas Oil & Refining Co.'s refinery is rapidly materializing. The plant will produce only high octane aviation motor fuels.

(Continued from Page 11)

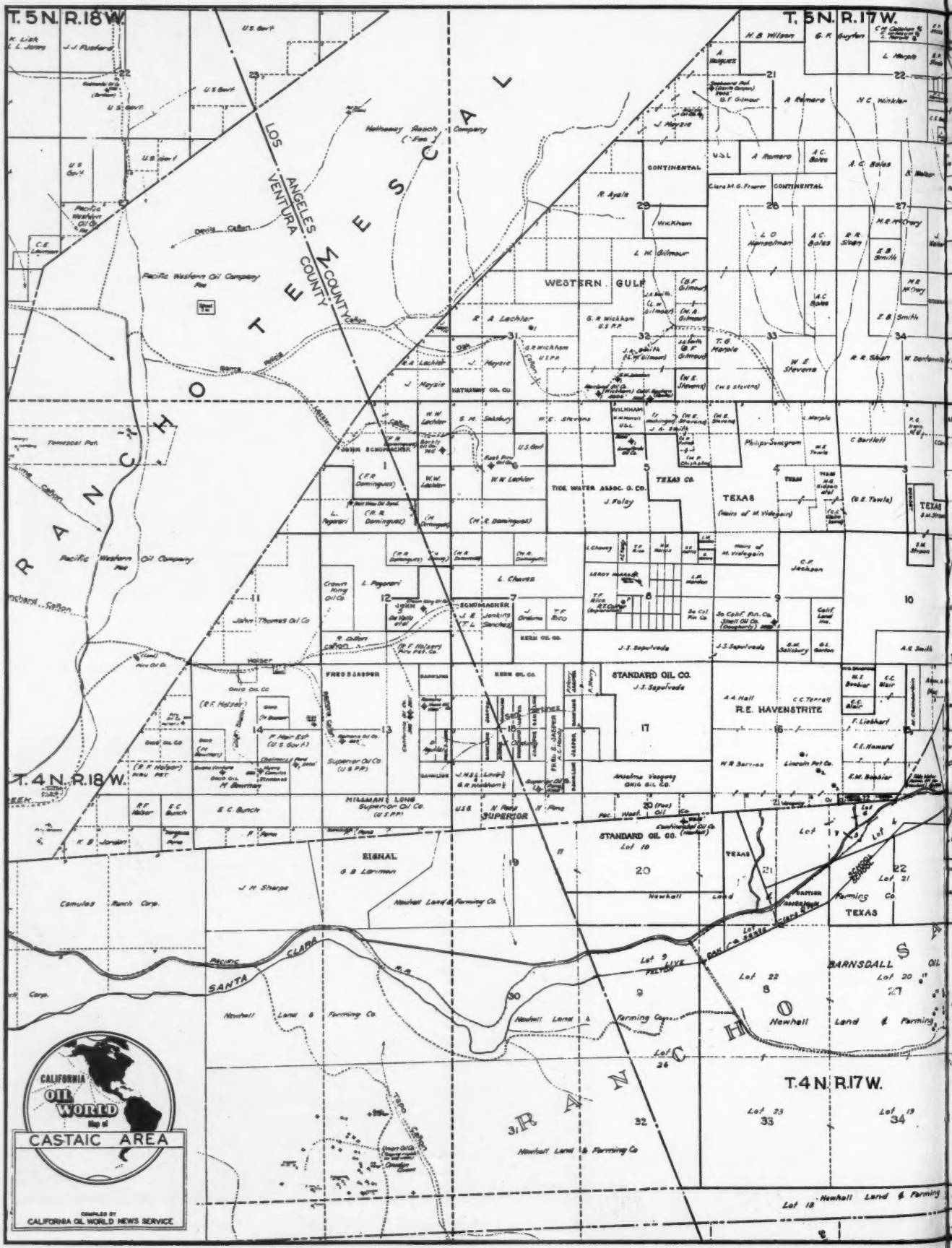
by a viscosity breaking unit, which is the only one in the Santa Maria Valley today and gives an added outlet for gasoline in that the Pacific Central Refining Co. is manufacturing and selling gasoline under its brand name, "Hurricane", in the Coast counties. A complete Ethyl plant is part of the equipment of the Pacific Central Refining Co., and the response of the Santa Maria gasoline to lead has been gratifying. This is the only plant in which gasoline can be Ethylized in the district. The marketing is done through independent dealers and jobbers.

The Pacific Central Refining Co. has successfully produced fuel oil from Santa Maria Valley crude, and the refinery is now operating at full capacity.

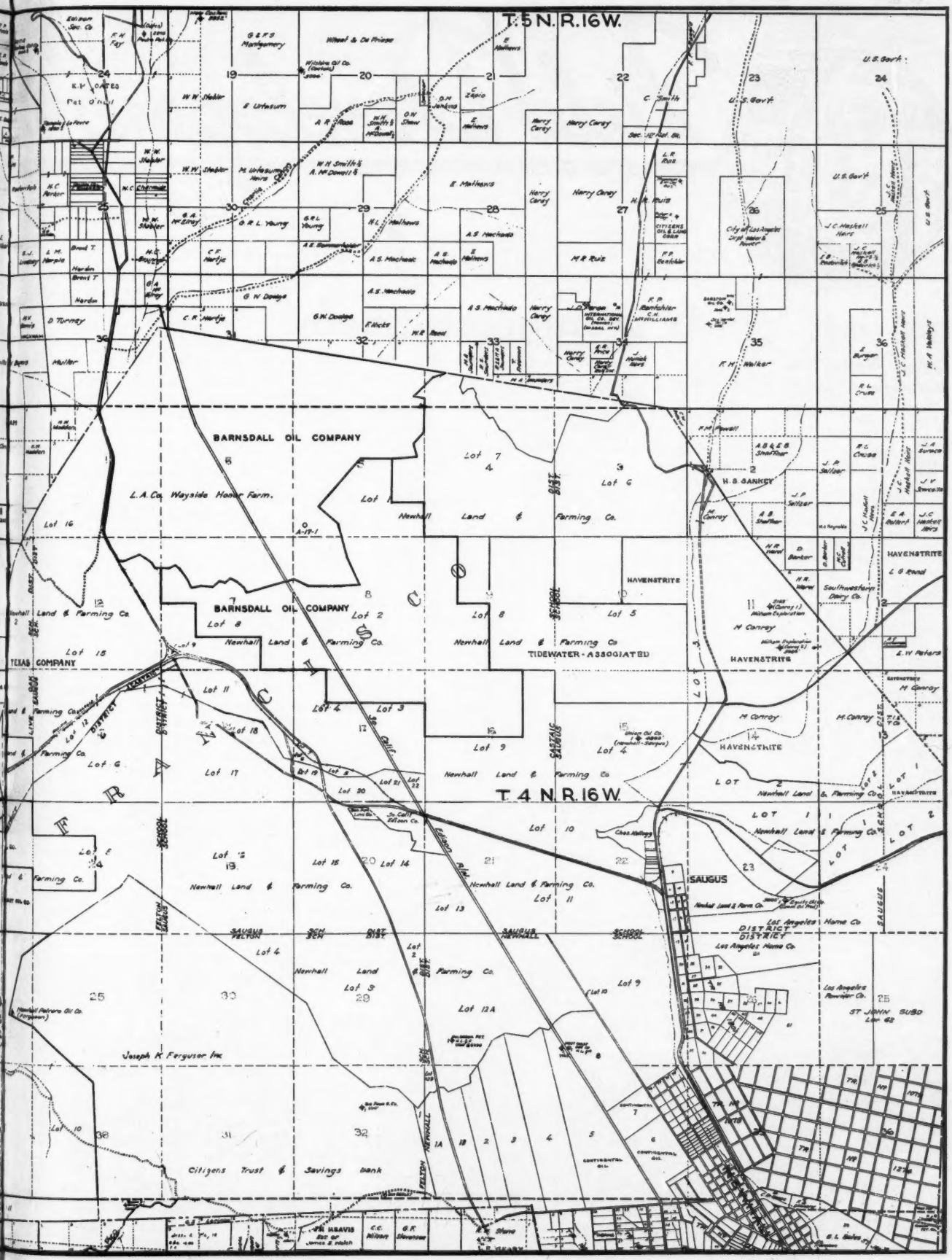
The Casmalia plant in the old Casmalia heavy oil field is being enlarged this month to take care of increased road oil and asphalt business. The crude situation has been gradually tightened in the Santa Maria Valley in the last year, and the O. C. Field Gasoline Corp. is furnishing both plants with crude.



With Driller H. C. Parker at the Federal well is Clay C. Bruington, of Edwards Wire Rope.



SCALE 1" TO 5000 FEET


T. 5 N. R. 16 W.
T. 4 N. R. 16 W.
BARNSDALL OIL COMPANY
L.A. Co. Wayside Honor Farm.
Newhall Land & Farming Co.
TEXAS COMPANY
TIDEWATER-ASSOCIATED
HAVENSTRITE
SAUGUS
Los Angeles Home Co.
Citizens Trust & Savings Bank
Joseph K. Ferguson Inc.
SOUTHERN PACIFIC RAILROAD
SAN FERNANDO ROAD
SOLEDAD CANYON ROAD
SAN FRANCISQUITO CREEK
SAUGUS SCHOOL DIST.
NEWHALL SCHOOL DIST.
SAUGUS UNION SCHOOL DIST.
SAUGUS PALMER SCH. DIST.
ST. JOHN SUBD.

Field Development

Los Angeles Basin

Deep Wells Test Rosecrans Field

Three deep wells are at critical stages in the Rosecrans field and should soon throw much light on the future course of development. Most important, at present, is Universal Consolidated Oil Co.'s Trust No. 8 which is located north of Rosecrans Blvd. and west of Figueroa St. A combination liner containing 165 ft. perforated was landed on bottom at 9350 ft. and cemented through perforations at 9185 ft. to test a sand interval previously untried in this portion of the field. If production is obtained, properties of Union Oil Co., Barnsdall Oil Co., Wilshire Oil Co. and H. B. Oil Co. will be considered proved while the potentialities of the extreme southerly section will be considered very good.

South of Rosecrans Blvd. and east of Figueroa St., Union Oil Co. is coring ahead in Rosecrans No. 45 below 9600 ft. A fair amount of tight oil sand has been encountered.

Midfield Oil Co. continues to perforate and test its Murdoch No. 1 near the intersection of San Pedro St. and Compton Blvd., but results so far have been only gas, water and a little oil. Several intervals have been shot from 8670 ft. to bottom at 9499 ft.

Seeking to extend the field to the south, Royalty Service Corp. is drilling Stein No. 1 near the 7000 ft. level. St. Anthony Oil Corp.'s Gordon No. 7 is nearing its final depth at the northeast corner of Broadway and Redondo Blvd.

Exploration Interest Centered Around Castaic

From the standpoint of exploration, the Castaic area is far the most interesting in California at present. Completion of Lechler No. 1 in Oak Canyon by Western Gulf Oil Co. re-awakened operators to the shallow possibilities of the district which heretofore have been largely overlooked and several independents are planning to drill in the immediate future. Among the first to get started will be Fred S. Jasper in the southwest quarter of sec. 17,4-17, a mile and a half west of the Del Valle field, and Morse-Mangold Oil Co. which expects to start soon in sec. 26, 5-17.

Barnsdall Oil Co. is preparing to build a derrick for Honor Rancho No. A-17-1 on the Los Angeles County honor prison farm near the southwest corner of

LOS ANGELES BASIN WILDCATS

Area	Well	No.	Section	Depth	Status
Athens	Rankin & Williams	1	7, 3-13	9098	Drilling
	Barnsdall Oil Co., Honor Rho A–17–1		5, 4-16		Grade
Castaic	Colter, R. T., Explor.	1	8, 4-17	1338	Cleaning out
	Havenstrite, R. E., Lincoln	3	16, 4-17		Rig
	Havenstrite, R. E., Vasques	1	24, 4-17	1365	Drilling
	Universal Cons. Oil Co., Dennis	1	21, 4-17		Rig
	Western Gulf Oil Co., Lechler	1	31, 5-17	2442	Pumping
	Worland Oil Co., Jenkins-Owens	1	18, 5-16	2940	Idle
Dominguez, West	Hiles Drilling Co., Grant	1	29, 3-13	7660	Rig
	Wood-Mellon Oil Co., Wood	1	31, 3-13	7498	Prep. to resume
Malibu	Sovereign Oil Corp., Sovereign-Marblehead	1	7, 2-18	3516	Drilling
Mint Canyon	Redwood Oil Co., Mitchell	2	22, 4-15	1580	Abandoned
Monterey Park	United Petroleum Co., Haig	1	26, 1-12	3681	Idle
Newhall	Lee, Wm. Y., Irene	1	31, 4-15	300	Idle
	Purman, Thos. H. T., Needham	1	13, 3-16		Location
Palos Verdes	Rolling Hills Pet.	1	27, 4-14	6580	Idle
Redondo	Silver Circle Oil Co., Cal-o	1	18, 4-14	3464	Idle
	Pettijohn, J.E., Dominguez Estates	1	5, 4-14		Grade
Puente	The State Co., Rowland	1	14, 2-10	2768	Idle
San Fernando	Casa Grande Oil Co., Lopez-Lundy	1	1, 2-15	3785	Idle
West Whittier	Cal. Pico Oil Co., Beach	1	7, 2-11	7788	Idle
	Orange County				
Costa Mesa	Thompson, Milton N., Banning	1	9, 6-10	5649	Testing
Kraemer	Valley Petroleum Co., Kraemer	1	25, 3-9	604	Idle
	San Bernardino County				
Carbon Canyon	May, Homer, Oasis	1	31, 2-8		Rig

NORTHERN COUNTIES WILDCATS

County	Well	No.	Section	Depth	Status
Contra Costa	Lafayette Oil Co., Morris	1	28, 1n-2w		Location
Humboldt	Daly, M. B., Jr.	1	2, 1n-2e		Bldg. rig
Madera	Blake, T. N., Arnold	1	22, 10-17	3204	Idle
Merced	Don Pedro Oil Co.	1	9, 6s-9e	1906	Idle
Mendocino	Keyt, N. F.	1	3, 12n-17w	210	Drilling
Monterey	Loma Grande Oil Co., Corey	1	23, 24s-10e	2175	Idle
	Priest Valley Pet. Co., Greve	1	22, 20s-12e	2885	Stdg. cem.
Sacramento	Harkness, Tracy	1	35, 8n-4e		Rig
San Mateo	Ra-Lite Petroleum, Inc., Bell	5	16, 7s-4w	1200	Idle
Yolo	Standard Oil Co., Tippets	2–1	9, 12n-3w	3240	Abandoned
Yuba	Wright, L. G., Cox	1	18, 14n-5e	1795	Cleaning out

sec. 5,4-16. Three separate anticlines are said to traverse this property which brought what is probably the highest price ever paid for strictly wildcat acreage.

Though production of Western Gulf Oil Co.'s Lechler No. 1 in sec. 31,5-17 is not as large as hoped for in some quarters, it probably will be a commercial well due to its shallow depth. Drilled to 2242 ft., the hole was plugged to 2415 ft. and casing set at 2296 ft. A gravel packed liner was run and, after several days of bailing, the well put on the pump. A 100 bbl. initial rate dropped to 54 bbls. after a few days and the hole was cleaned out and re-washed which resulted in a 59 bbl. per day yield. Gravity of the oil is 23.5 degrees and the cut of 20% is mostly sand and emulsion.

The formation productive at Oak Canyon is Modelo, similar to the prolific zones of the Del Valle and Newhall-Potrero fields where several thousand feet of Pliocene overlays the Miocene.

Lease transactions continue numerous throughout the whole district indicating more drilling can be expected. Leasing has not been confined to independent operators, nearly all the majors having acquired properties with relatively short drilling clauses.

The map in the center section of this issue of California Oil World covers the entire Castaic area and includes the Del Valle and Newhall-Potrero field which are shown in the south-central portion. Scale of this map is approximately 5000 ft. to the inch.

Puente Wildcat Standing Idle

The State Co. Puente wildcat, Rowland No. 1, failed to find good sands to 2768 ft. and is standing idle. Some tar sand was cored near the 1000 ft. level but was not considered good enough to warrant a test.

The well is said to correlate about 500 ft. higher than the old Vega well to the west which produced a small amount of oil several years ago. It is now believed that a fault exists between the two. Another company is negotiating to skid the derrick and drill another hole.

Geo. Snyder Acquires Wood-Mellon Wildcat

Geo. N. Snyder has taken over the Wood-Mellon Oil Co. wildcat at the northeast corner of Victoria Ave. and Figueroa St. and is preparing to reperforate the casing cemented on plugged bottom at 6975 ft.

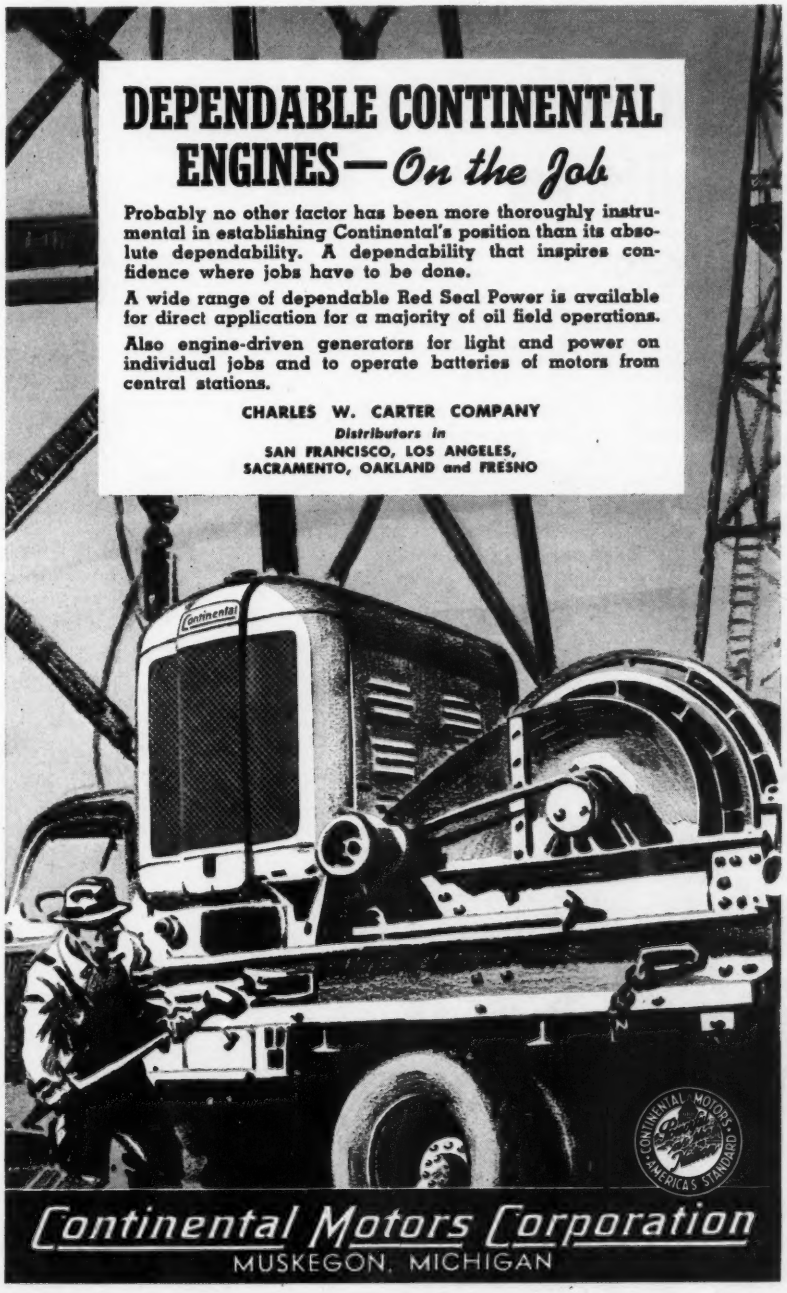
The well was drilled to 7498 ft. finding a few showings in the 6th Callender zone only. Casing was cemented and gun-perforated but very little fluid was recovered on a production test two months ago.

West Wilmington Area Will Soon Be Active

That the extreme west end of Wilmington will soon be the hottest spot in the Los Angeles Basin is the prediction of many local observers who claim the present 130 bbl. production of Silver Petroleum Co.'s well is ample to return the modest cost of drilling within a reasonable length of time. Producing at 200 ft. Upper Terminal zone interval immediately above bottom at 3761 ft., Silver's No. 1 is a good commercial well due to the ready marketability of its 19 gravity clean oil.

Further proof of the new area will soon be had from Acoma Oil Co.'s No. 1 which is nearing the top of the zone. Los Angeles Basin Petroleum Co. has foundations in for Phillips No. 1 while De Marsh Oil Co. and Bass, Goodknight & Westlund plan to get under way in a short time.

You are reading the Pacific Coast oil men's home paper.


DEPENDABLE CONTINENTAL ENGINES—On the Job
Probably no other factor has been more thoroughly instrumental in establishing Continental's position than its absolute dependability. A dependability that inspires confidence where jobs have to be done.
A wide range of dependable Red Seal Power is available for direct application for a majority of oil field operations.
Also engine-driven generators for light and power on individual jobs and to operate batteries of motors from central stations.
CHARLES W. CARTER COMPANY
Distributors in
SAN FRANCISCO, LOS ANGELES, SACRAMENTO, OAKLAND and FRESNO
Continental
CONTINENTAL MOTORS AMERICA'S STANDARD
Continental Motors Corporation
MUSKEGON, MICHIGAN

Dominguez Test Passes 12,660 Ft.

Having just passed the 12,664 ft. mark, Union Oil Co.'s Callender No. 79 at Dominguez is still going strong. Formation data is still being closely guarded by the company.

Union Oil Co. is drilling Callender No. 82 below 7500 ft. and is spudding Austin No. 7. Callender No. 84 will be drilled on the No. 2 parcel at the northwest end of the field.

R. E. Havenstrite's westerly outpost, Larronde No. 6, made a fine well producing only 82 ft. of the Seventh Callender zone. Bottomed at 7215 ft., initial production was 1010 bbls. a day of 32 gravity clean oil through a 36/64 in. bean. Larronde No. 5, however, did not do so well. Directionally redrilled to 7815 ft., the well was swabbed nearly dry on a production test.

Hiles Drilling Co. has built a rig over the abandoned Gus Pongratz Oil Co. Grant No. 1 which was drilled last year west of the Union Oil Co. Austin lease. The new operator plans to set casing for a production test of the Seventh Callender zone.

C. J. Flanagan is planning to drill to the Seventh Callender near the northwest corner of the Larronde lease. Mr. Flanagan is well known through his ownership of Service Oil Field Supply Co.

Cutting California Costs

Some producers don't believe it. Others haven't heard it. But the fact remains—we're cutting costs for California customers.

Don't be too busy for your own good. Don't be too skeptical. Ask Turner, our California representative, address below. If he says you can lift oil for less money with JENSEN JACKS—well, you can! He knows what he's talking about. He can prove what he tells you.

We are the oldest and largest exclusive makers of pumping equipment in the world. We've been solving production problems for 22 years. If you want to hear more, wire us at Coffeyville or get in touch with that man . . .

A. V. TURNER
445 W. 6th, Downey, Calif.
Phone: Downey 47478

JENSEN BROTHERS MANUFACTURING CO.

Coffeyville, Kansas, U. S. A.

EXPORT OFFICE: 50 Church St., New York City

Inglewood Test Stands Cemented

Federal Oil Co.'s Smith No. 1, now operated by R. R. Bush Oil Co., is standing with 7 in. casing cemented at 7920 ft. Drilling below this point was difficult because high gas pressure lightened the mud fluid and the hole was bottomed at 7993 ft. until casing could be run. It is probable that a formation test will be made of the open interval before any more hole is made.

Productive possibilities of the Smith well can only be conjectured at the present time as core recovery was poor throughout the zone. The electric log is said to indicate low permeability leading some observers to believe that the zone may yield only a small volume of oil and gas despite the evident high gas pressure.

Correlations place the well 300 ft. higher on structure than R. R. Bush's Sentous No. 1 on the westerly flank of the field. Apparently due to the tightness of the formations, the Sentous well is capable of only small production.

After setting casing at 9011 ft., Standard Oil Co.'s L.A.I. No. 3-1, also on the west flank, is coring ahead at 9050 ft. Several formation tests have given but little encouragement.

Meanwhile, R. R. Bush Oil Co. is grading location for Merchants No. 1 east of the Smith project.

Union Oil Swabs Deep Hill Well

With bottom plugged from 10,894 to 10,582 ft. and casing cemented at 9657 ft., Union Oil Co. is swabbing L.B.C. No. 19 on Signal Hill. Located south of 25th St. across from Dormax No. 1, the Union project is the deepest ever drilled in the Long Beach field.

Conflicting reports are received on Royalty Service Corp.'s I.C. No. 1 which is located on California Ave. one block south of Wardlow Road. Though the bottom at 6685 ft. is said to be in gray sand, casing is being run and preparations are underway for a production test.

Interest was revived in the northwest extension area by the recompletion of Pool No. 1 by Hilldon Oil Co. after deepening to 5616 ft. Casing was cemented on bottom and gun-perforated at intervals from 5180 to 5420 ft. Production on gas lift is 260 bbls. a day of 26 gravity clean oil.

New Potrero Well Flows 350 Bbl. Rate

Potrero No. 10, Basin Oil Co.'s newest well on the Potrero golf course, was plugged back from 6589 ft. to 4085 ft. and completed flowing 355 bbls. daily of 51 gravity clean oil. The casing was perforated at intervals below 370 ft.

Basin has derrick up for Potrero No. 12.

Silver Circle Quits South Redondo Trial

Silver Circle Oil Co. suspended drilling Cal-O No. 1 at 3464 ft. in black shale after passing through a fault zone from 3175 to 3200 ft. Started under the name California Oil & Refining Co., the project is located about 2000 ft. west of the old Hunter-Devlin well south of the Redondo end of the Torrance field.

Costa Mesa Well Tests Tar Sands

Milton N. Thompson's Banning No. 1 at Costa Mesa, which has been idle for the past year, is gun-perforating 8⅝ in. casing cemented at 1300 ft. for a test of shallow tar showings. Total depth of the hole is 5649 ft.

Sovereign Resumes Pt. Dume Wildcat

Sovereign Oil Co. resumed work on its Point Dume wildcat, Malibu No. 1, and deepened to 3516 ft. Boilers are being reconditioned preparatory to drilling farther.

Pint-sized automobile operating on battery when out of gas, and on foot pedals when out of electricity.

Cooler for small dairy farms runs on gasoline or electricity.

San Joaquin Valley

Texas Co. Drilling Cantua Creek Test

The Texas Co.'s S. P. No. 27-13, a continuation of a long range exploration program in the Cantua Creek area of Fresno county, was last reported below 7090 ft. Being drilled under contract by the Pike Drilling Co. in sec. 13,17-15, the well is the 15th to prospect the general area, many of the previous tries found sufficient showings to afford a stimulus for continued work.

The company's own S.P. No. 1 half a mile southeast of the current well, recovered some distillate and gas from Eocene sands at 9413 ft., while a small amount of 35.8 gravity oil was obtained from Temblor sands at 6950 ft. in a Western Gulf Oil Co. well on sec. 3,17-15 in 1937. Hope that better saturated sands may some day be found is bolstered by the fact that several bodies have been logged down to depths below 12,000 ft.

Northern Cretaceous Well Continues Modest Flow

Jergins Oil Co.'s Mendota area strike, Cheney Ranch No. 2 in sec. 29, 14-13, continues to produce 9 bbls. of 52 gravity distillate and 564,000 cu. ft. of gas. Water content of the recovery is placed at 10.0%. The current production figures were obtained after the company had further perforated the already perforated liner from 7232 ft. to 7268 ft.

Although production so far does not seem to be a commercial success, it does strengthen the hope that further drilling to the Cretaceous may elsewhere find better yields. Until this production was obtained, only the tiny Oil City area north of Coalinga produced from the Cretaceous.

Conoco Enters Grapevine Play

Moving in on approximately 2400 acres of the Reserve Oil & Gas Co. Tejon Ranch Holdings, Continental Oil Co. is preparing to drill a Grapevine area wildcat in the northeast quarter of sec. 28, 11-19. Located between the Ohio Oil Co.'s T.I.T. No. D-1, a 9654 ft. wildcat drilled near the east quarter corner of sec. 21, 11-19 during 1937, and the small production found in the Grapevine pool near the center of sec. 33,11-19, the current play is believed to be predicated on showings from the previous drilling as well as exhaustive geophysical exploration.

Northeast of Continental's play, in the center of sec. 19,11-19, Kern Line Oil Co. recovered only brackish water on a formation test from the shoe of 6⅝ in. casing at 8200 ft. to bottom at 8320 ft. With no water cushion and the tester open 18 hours, recovery consisted of 1850 ft. of thin mud and brackish water and only slight gas showings.

Recovery of the nearly fresh water may account for the controversial electric log interpretations prevalent prior to the test. Since this type of fluid content produces "wiggles" similar to petroleum saturated sands, it is always difficult to distinguish between them in wildcat locations where there is nothing against which the log may be correlated.

Southeast of this area, in sec. 2,10-19, Richfield Oil Corp. is coring siltstone at 10,155 ft. in Tejon Ranch No. 1. Drilled as another geologic check on Richfield's tremendous south Valley holdings, the well has shown nothing of promise to date.

Two Active in Richgrove Area

A. J. Borget is drilling Kendall No. 1 at 185 ft. in sec. 16,25-27 and Bolling Oil Co. has built a rig to drill Quinn No. 2 near the center of sec. 14-25-27. These projects are attempts to find producible sands indicated by the slight production obtained by Dilamar Pet. Corp.'s Quinn No. 1 in sec. 15,25-27 in 1938. This well pumped an initial 60 bbl. daily rate of 10 gravity oil cutting 10.0%, with volume declining and water cut increasing in a very short time. The production was obtained from a plugged depth of 2880 ft. Numerous wells have been drilled in the area, some of which found oil showings, but none came so close to commercial completion.

Continental Spuds New Shafter Test

Continental Oil Co. has spudded KCL No. C-2 in sec. 35,27-24 in the Shafter area. Located on a line drawn through the Rio Bravo and Wasco fields, the new well is the latest of a long series of tries at finding production between the two fields. Many companies have participated in the program and wells along the trend have been carried as deep as 13,000 ft. without success.

SAN JOAQUIN VALLEY WILDCATS

Area	Well	No.	Section	Depth	Status
	Fresno County				
Cantua Creek	The Texas Co., S. P.	27–13	13, 17-15	8062	Drilling
Gatos Creek	Gatos Creek Oil Co.	1	19, 19-13	791	Idle
Mendota	Jergins Oil Co., Cheney Ranch	1	29, 14-13	9345	Idle
		2	28, 14-13	7354	Flowing gas
	Kern County				
Belridge—South	Santa Mora Oil Co.	1	10, 28-20	544	Idle
Buttonwillow	The Texas Co., S. P.	47–15	15, 29-24	7956	Drilling
Devils Den	Herzog, R. D., Marine	29	26, 25-18		Location
	Herzog, R. D., Marine	1	26, 25-18	708	Idle
Edison	Goodrum & Vincent, Inc., S. P.	7	31, 29-30	460	Idle
	Kern Valley Drlg. Co., Williams	1	30, 30-30	333	Idle
Grapevine	Continental Oil Co., Reserve	1	28, 11-19		Location
	Kern Line Oil Co.	1	19, 11-19	8320	Testing
	Richfield Oil Corp., Tejon Ranch	1	2, 10-19	10158	Drilling
Lost Hills	Randan Pet. Corp., Theta	1	3, 26-20	1625	Idle
McKittrick	Smith, Ebert E., Smithhart	1	34, 30-22	2278	Idle
Mount Poso	Copeland, F. B., Thomas	1	15, 26-27		Rigging up
Richgrove	Borget, A. J., Kendall	1	16, 25-27	210	Drilling
	Bolling Oil Co., Quinn	2	14, 25-27		Rig
Round Mountain	Spartan Drlg. Co., Hiatt	1	32, 28-29	2085	Idle
	Crestmont Oil Co., Russell	1	6, 28-29	1845	Abandoned
Shafter	Continental Oil Co., KCL	C-2	35, 27-24	5613	Drilling
Strand	Tide Water Assoc. Oil Co., KCL	56–8	8, 30-26		Location
Union Avenue	Hancock Oil Co., Roberts	1	6, 30-28	5593	Pumping
Wheeler Ridge	Richfield Oil Corp.	KCL 2	28, 11-20	11681	Drilling
	Kings County				
Pyramid Hills	Bristol Oil Co., Smith	1	35, 24-19	8054	Testing
	Chanslor-Canfield Midway Co., Bocquarez	1	17, 24-18	889	Drilling
	Pyramid Prod. Co., Spreckles	2	16, 24-18		Rig
	Tide Water Assoc. Oil Co., West Slope	76	20, 24-18		Foundation
Reef Ridge	Blair Oil Co., Blair	1	24, 23-16	72	Idle
	Tulare County				
Terra Bella	Arnold, V. F., T.B.I.D.	1	5, 23-28	45	Drilling

Marine Showings Prove Failure

Tests of what appeared to be oil sands of marine origin in the Walker series proved unfruitful in Crestmont Oil Co.'s Russell No. 1, sec. 6,28-29, in the Coffee Canyon area of Round Mountain.

Thought to be a promising sand finger in the normally barren Walker, the sand was cored from 1580 ft. to 1680 ft. where hard gray sand carried to bottom at 1845 ft. The Vedder zone, usual producing sand in the area, was found barren at 1480 ft.

After plugging the hole to 1674 ft., casing was cemented at 1584 ft. and liner run for a trial. Continued bailing failed to lower the fresh water level below 850 ft., and the well was abandoned.

In sec. 8, 28-29 of the Round Mountain area, Trico Oil & Gas Co. has built rig for Coffee No. 5 for further drilling of a small pool proved productive by the company late last year.

Hancock Completes Union Ave. Pumper

At the southerly limits of Bakersfield, on much drilled section 6,30-28, Hancock Oil Co. has completed Roberts No. 1 pumping 150 bbls. of 15 gravity oil cutting 8.0% mud and fresh water. Drilled to 5593 ft. and later plugged to 5340 ft., the well is producing from perforations open from 5282 ft to 5312 ft. The present creditable production is being made with a relatively slow pump stroke and many expert observers believe that the well is capable of much higher production with a faster stroke.

Apparently convinced after 10 days pumping that the reservoir is adequate, Hancock is preparing to drill a No. 2 well at once. Located in the southeast quarter of the section, the strike will probably touch off a minor drilling boom, since the area surrounding the discovery acreage is made up of small parcels in the hands of many operators.

Deep Try Abandoned At Wheeler Ridge

Richfield Oil Corp.'s second attempt at deep production near the shallow field on top of Wheeler Ridge has been abandoned. The well, Wheeler Ridge-KCL No. 2, was bottomed in hard shale at 11,681 ft. Formation tests of grayish looking sands, similar to those producing from the Eocene in northerly fields, were tested near 11,000 ft. but yielded only salt water with a trace of high gravity oil.

Crude Oils Inc. Laying Edison Production Plans

A permit to issue stock has been issued to Crude Oils Inc., formerly known as Goodrum & Vincent. According to the operators the company will purchase tankage, boilers, lease lines, etc. with the intention of placing on production a group of five low gravity shallow wells the company controls in sec. 31,29-30, northeast of the Edison field. Capable of producing an average of 5 bbls. of 12 gravity oil each, the wells have been idle due to a lack of facilities for handling the production.

Pyramid Hills Test Reports Oil Sand

Chanslor-Canfield Midway Oil Co.'s Bocqueraz No. 1 in sec. 17,24-18 of Kings county, reports Kreyenhagen oil sand at 840 ft. after entering the body at 765 ft. The presence of oil sand in this, a normally shale horizon, opens a wide vista of speculation. Sand streaks are found in the Kreyenhagen elsewhere, but to date have proved barren excepting for small recoveries at Devils Den.

The well is a half mile northwest of Tide Water Assoc. Oil Co.'s West Slope No. 1 which pumps a small amount of 16 gravity clean oil from sands at 950 ft.

THE NEILSEN PUMP COMPANY

... announces the purchase of the entire sub-surface pump business, including the use of I. R. Metal, from the Alford Pump Company.

Prompt service and courtesies formerly extended by the Alford Pump Company will be continued by the same personnel.

★

NEILSEN PUMP COMPANY

Main Plant
3204 Cherry Avenue
Long Beach, California
Phone 416-51

BRANCH STORES

TAFT
Fourth and Supply Row
132 Phones 439

BAKERSFIELD
1125 34th Street
Phone 7724

VENTURA
1701 N. Ventura Ave.
Phone 5231

SANTA MARIA
At Beacon on Highway 101
Phone 1033

Tide Water has drilled two other wells in the vicinity without finding production, and is now rigging to drill West Slope No. 76 in the southeast quarter of sec. 20,24-18.

Deep Tests Progress On So. Valley Hills

Exploration to depth on the hills at the south end of the San Joaquin Valley is progressing rapidly.

In the Buena Vista Hills area, Honolulu Oil Corp.'s No. 25-P on sec. 10,32-24 is coring at 12,160 ft. Due to a high structural advantage, the well has already gone much lower into the geologic column than other deep wells drilled at the base of the hills. The project is further remarkable that it is the deepest hole to be drilled, in California at least, by the sole use of an electric rig. The operation is even more unusual due to the fact that the rig was designed for only moderate depth, yet the outfit continues to make hole in tough going without revision.

Another project aimed at examining the lower horizons to the greatest possible depth is Standard Oil Co.'s No. 42-31S in sec. 31,30-24 on top of Elk Hills now reported at 5750 ft. The well is rigged with the newest and heaviest equipment available, and barring accident or promising production, will drill as deep as the heavy rig will go. Standard is also drilling a shallow test, No. 44-29S, at 2815 ft. on sec. 29 immediately northeast of the deep try. The company is also preparing to drill a deep and a shallow hole on sec. 19, 30-24. By these preparations it is apparent that the company means to learn all it can about the geologic and production prospects of the Elk Hills.

Fishing Job Delays Buttonwillow "Cat"

The Texas Co.'s S.P. No. 47-15, deep try for a productive closure in the Buttonwillow area, is stalled by a drill pipe fish with bottom reported at 7950 ft. Located in sec. 15,29-24, the well lies between other deep tries which found sand bodies too tight to produce at several intervals down to 12,000 ft.

New Greeley Well Makes High Initial

Wilshire Oil Co.'s Campen No. 1 in sec. 1,29-25 at the northwesterly tip of the Greeley field, was completed from 11,500 ft. flowing 3500 bbls. of 34.6 gravity oil cutting 2.2% through a 30/64 in. bean. Pressures were marked as 1200 lbs. on the tubing and 1520 lbs. on the casing. An advantageous gas-oil ratio was obtained with 3,500,000 cu. ft. of gas accompanying the flow. At last report the well was standing shut in.

Standard Oil Co. recently completed KCL No. 11-26 from 11,510 ft. at the center of the southwesterly flank of the field flowing 1250 bbl. rate through a 25/64 in. bean. Gravity of the clean oil was 35.8 and the gas was measured at 1,134,000 cu. ft. establishing a good gas-oil ratio. The well was last reported as shut in under 1300 lbs. pressure.

Hollister No. 2-A Tests Wet at Goleta

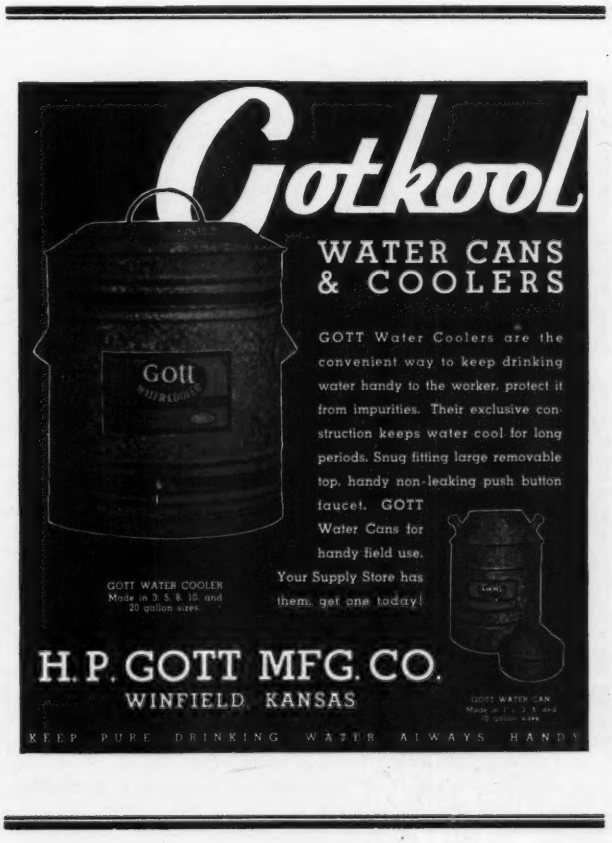
Spencer D. Coates has been unsuccessful in obtaining production in the old Hollister No. 2-A at Goleta. Plugging and perforating the casing resulted in only water. The well was originally drilled about 14 years ago by Santa Barbara Oil & Gas Co. shortly after the light oil discovery by E. J. Miley.

Del Mar Rigging No. 1 Rowe Well

Del Mar Oil Co. is rigging up to drill a wildcat well on the Rowe property in sec. 11,4-28. The well seeks Vaqueros production.

Bootleg-proof oil can, with dented rims, prevents refilling.

Oilfield ROPE
Here is a rope designed especially for rugged service—rope made from an intimate knowledge of oilfield rope requirements. Specify this famous Marine grade oilfield Rope by brand name—TUBBS EXTRA SUPERIOR MANILA.
Distributed by
Allied Supply Co.
Clarke, Wall, Inc.
Hickey Pipe & Supply Co.
TUBBS CORDAGE COMPANY
EXTRA SUPERIOR MANILA
SAN FRANCISCO
TUBBS CORDAGE CO.
SAN FRANCISCO


Gotkool
WATER CANS & COOLERS
GOTT Water Coolers are the convenient way to keep drinking water handy to the worker, protect it from impurities. Their exclusive construction keeps water cool for long periods. Snug fitting large removable top, handy non-leaking push button faucet. GOTT Water Cans for handy field use. Your Supply Store has them, get one today!
Gott
GOTT WATER COOLER
Made in 3, 5, 8, 10, and 20 gallon sizes
H. P. GOTT MFG. CO.
WINFIELD, KANSAS
KEEP PURE DRINKING WATER ALWAYS HANDY

Coastal District

Petrol Completing Gato Ridge Well

The Petrol Corp. is preparing to recomplete Tognazzini No. 3-15 at Gato Ridge after deepening from 2900 ft. to 4696 ft. At the original depth, with formations open at intervals below 1850 ft., the well flowed 13 gravity oil at an estimated 600 bbls. per day rate.

No. 3-15 is a southeasterly outpost at Gato Ridge, being located nearly a mile from its nearest neighbor.

Texas Co. Abandons Elwood Exploration

For the time being, at least, The Texas Co. has given up for a new field in the Elwood area of Santa Barbara county. The company's latest try, Bishop No. A-2, was abandoned at 3025 ft. after finding the Vaqueros barren at 2920 ft.

Union Re-enters Old Orcutt Field

With the starting of two new wells, Union Oil Co. is actively re-entering the old Orcutt field south of the city of Santa Maria. Rig sites are being graded for both projects. Dome No. A-15 will be in sec. 24,9-34 while Cal-Coast No. 19 will be in sec. 26.

Mesa Well Pumps 20 Bbls. Gross

Transoceanic Oil Corp.'s Santa Barbara Mesa field outpost, M'divani-Wallace No. 1, was something of a disappointment when on production test, the yield settled to 20 bbls. a day of fluid cutting 35%. The hole was carried to 1722 ft. but plugged to 1705 ft. where 20 ft. of formation is open.

Union Finishes Valley Producer

With bottom at 4820 ft. and liner cemented through perforations at 4450 ft., Union Oil Co. is completing Fleisher No. 1 on the pump as the most southeasterly producer in the Santa Maria Valley field.

At the west end of the field, Union's Moretti No. 3-1 is below 4000 ft.

Oxnard Exploration Stopped Abruptly

Exploration for oil in the Oxnard area was stopped abruptly with the suspension of operations in E. A. Bender's Farrell No. 1 at 7005 ft. and the abandonment of Montgomery No. 1 by The Texas Co. at 7387 ft. Although each well encountered a few showings, neither was even close to a commercial producer. Before pulling out, The Texas Co. made a formation test from 7312 ft. to bottom recovering 270 ft. of mud with a little tar.

C. C. M. O. to Test Rincon Outpost

Chanslor-Canfield Midway Oil Co., oil operating unit of the Santa Fe Railroad, is preparing to complete Hobson No. B-40 near the southeast end of production in the Rincon field. Drilled to 5503 ft., the well encountered the top zone from 4680 to 4790 ft., the intermediate zone from 4800 to 5200 ft. where the top of the Miley Shale was found, and the lower horizon from 5290 ft. to bottom. The last few feet of formation was reported as shale with streaks of oil sand and gray sand. Casing has been cemented at 5325 ft. and it is probable the well will be completed similarly to No. B-36 which plugged bottom from 5628 ft. to 5343 ft. and was finished by gun-perforating several intervals. Production averaged about 100 bbls. a day.

In the central portion of the field, C. C. M. O.'s scheduled deep test, Hobson No. C-9, is drilling below 3100 ft.

More Interest Shown In North Avenue Area

Despite continued water trouble in British American Oil Producing Co.'s Hartmann No. 4, more interest is being shown in the north-central section of the Ventura Avenue field. California Alliance Oil Co. has derrick up for Hartmann Ranch No. 3 and a new group of individuals are considering drilling on an adjoining property.

Shell Oil Co.'s last completion, Taylor No. 130, proved to be an excellent producer, making a potential of 2650 bbls. of 31 gravity clean oil and 6,000,000 cu.

COASTAL COUNTIES WILDCATS

Santa Barbara County

Area	Well	No.	Section	Depth	Status
Elwood	Bolsa Chica Oil Co., Permit	191–7	24, 4-29	4313	Idle
	The Texas Co., Bishop	A–2	13, 4-29	3025	Abandoned
Goleta	Coates Spencer D., Hollister	2–A	3, 4-29	1570	Idle
	Del Mar Oil Co., Rowe	1	11, 4-28		Rigging up
Summerland	Barnato Corp., The ,Hyland	1	16, 4-26	3415	Idle

San Luis Obispo County

Huasna	Tex Harvey Oil Corp., Gilmore Comm.	1	11, 32-14	4518	Washing w/oil
	Tex Harvey Oil Corp., Gilmore Comm.	2	11, 32-14	950	Drilling

Ventura County

Bardsdale	American Seamless Tube Corp., Basola	1	5, 3-19	3140	Pumping
	Elkins, Reed	1	5, 3-19	902	Idle
	Hopland Oil Co.	1	1, 3-19	985	Idle
	Palma Oil Co., Elkins	1	8, 3-19		Grade
	Westoil Corp.	1	6, 3-19	525	Idle
Conejo	Sulphur Springs Oil Co., Janss	1	33, 2-19	4526	Idle
Ojai	Seaport Oil Corp., Arnett	3	15, 4-21	2532	Pumping
	Per-Col Oil Co., Anlauf	6	21, 4-21	2105	Idle
Oxnard	Bender, E. A., Farrell	1A	5, 1-22	7005	Idle
	The Texas Co., Montgomery	1	13, 2-22	7387	Abandoned
Piru	Nelson, D. V., P.F.C.—C.H.	1	19, 4-18	1105	Cleaning out
	Oilexco, Inc., Newhall-Lund	2	2, 3-18	570	Idle
	Oilexco, Inc., Stevens	1	34, 4-18	373	Idle
Sespe	Inter Counties Fuel Co.	1A	22, 4-19	510	Idle
	Riley, Irene Burson	1	18, 4-19	2050	Idle
	Rio Hondo Oil Co., Cosby	1	14, 4-19	1695	Idle
	Signal Petroleum Co., Hadley	7	13, 4-19	2620	Drilling
Simi	Cannell, Robert, Robertson C.H.	1	17, 2-18	1200	Abandoned
South Mountain	Bolling Oil Co., Schieferle	1	17, 3-29		Cellar
	Calif. Securities Oil Co., Schieferle	1	17, 3-29	4501	Idle
	Comstock Pet. Co.	1	17, 3-29	1800	Idle
	South Mountain Oil Co.	1	10, 3-20	285	Drilling
Sulphur Mt.	Madison Oil Co., Delphy	1	24, 2-22	2500	Idle
Timber Canyon	Johnson, Chas. P., Jr.	1	24, 4-21		Rigging up

ft. of gas on an open flow test. The hole is open at intervals from 6240 to 7640 ft.

New Blood Enters Ventura Arena

With proved acreage relatively scarce in other parts of the State, more and more operators are becoming interested in Ventura County ventures. Latest operators to announce intentions are Oil Production Maintenance Co. and W. E. McCaslin. The former, composed of Frank Gilstrap and H. A. Clark, will drill a 77 acre lease in sec. 12,4-22 in the Upper Ojai district, while Mr. McCaslin is planning to deepen the Irene Riley well in the Sespe area.

Wet Weather Slows Ventura Development

Handicapped by winter rains, operators in the interior of Ventura county have been able to work only intermittently during the last two months and many wells are shut down awaiting the coming of the dry season. At South Mountain, however, South Mountain Oil Co. has been able to spud in and at last reports was drilling near the 500 ft. level.

More Valley—Basin

Crude Oils, Inc. Plans Timber Canyon Project

Crude Oils, Inc., recently formed by Geo. Goodrum and Bob Vincent, has acquired a lease in sec. 19,4-20 adjoining an old producing property of Empire Oil Co. in the Timber Canyon field. The new concern plans the drilling of several wells to depths ranging from 900 to 1500 ft. where light oil horizons are expected.

The Timber Canyon field, which has produced for the past forty years, has now only 25 bbls. a day total production from about 10 wells. Gravity of the oil averages 35 degrees.

"Tex" Harvey Spuds Second Huasna Well

"Tex" Harvey Oil Corp. spudded-in its Gilmore Community No. 2 at Huasna and is drilling below 1000 ft. after cementing surface casing at 950 ft. This well will be drilled deeper than No. 1 which stopped short of the Vaqueros at 4520 ft.

Continued efforts have so far failed to make a producer of No. 1 but the operators are still in there pitching. The hole has been cleaned out several times and at last reports was being washed with oil in preparation for further pumping trials.

Purman to Drill Well Near Newhall

Thomas H. T. Purman, a familiar figure in the California oil industry for years, is preparing to drill an exploratory well south of Newhall on the Needham property in sec. 13,3-16. Some production was developed on this lease years ago by General Petroleum Corp. and the No. 4 well was later deepened by Southern California Drilling Co. but operations were suspended when the drill pipe was lost in the hole. Consolidated Petroleum Co. then took over and carried the hole to the Eocene where a little oil was found but the sands were too impermeable to produce commercially.

New Athens Wildcat Cements Surface Pipe

Southern California Petroleum Corp.'s Howard Townsite Owners No. 1, semi-wildcat located at the southwest corner of 122nd St. and Vermont Ave., is preparing to drill ahead after cementing surface casing at 1000 ft. Rankin & Williams' test well east of Athens is fishing drill pipe at 9100 ft.

REPLACE GASKETS QUICKLY AND EASILY

with

FLANGE-JACKS!

TO OPERATE FLANGE-JACKS: Remove opposite flange bolts, insert jaws of Flange-Jacks in holes and tighten. After removing other bolts, tighten down jack-screws together, separating flanges evenly.

GASKETS on existing pipe lines can be quickly and easily renewed with Flange-Jacks—a specially designed tool recently introduced by Garlock.
No hammers . . . no chisels . . . no wedges . . . no broken flanges . . . no damaged faces . . . no pipe vibration . . . no dangerous sparks . . . no long shut-downs.
You just let Flange-Jacks do the work. Even if a joint is located where working space is cramped Flange-Jacks will open it easily. Write for descriptive folder!

THE GARLOCK PACKING COMPANY
Palmyra, New York
Tulsa, Okla. Houston, Tex. Los Angeles, Calif.

Tube-Turns, Inc., Sets Up West Coast Headquarters

Tom H. Pike, Jr., West Coast district manager for Tube-Turns, Inc., Louisville, Ky., has established permanent offices in Los Angeles, at 210 West Seventh Street. The entire West Coast and territory inland as far as Salt Lake City will be serviced from the new Los Angeles office.

Tom H. Pike, Jr.

Germany produces edible fats from oil derivatives.

A. C. Hacker Dies In Pasadena Hospital

A. C. (Jack) Hacker, vice president of the Hacker Pipe & Supply Co., Los Angeles, Calif., passed away Jan. 26, at St. Luke's Hospital, Pasadena.

Mr. Hacker was born in Ireland, of American parentage, in 1882. From boyhood days he was connected with the General Fire Extinguisher Co. throughout the East, later with the Grinnell Co., having been manager of their Philadelphia plant. In 1912 he came to Los Angeles and associated himself with the Los geles Gas Co. in various capacities of their sales department.

In 1919 he again became connected with the Grinnell Co., establishing their first Pacific Coast branch in Los Angeles, acting as sales manager with that concern until 1931, when he decided to enter the jobbing field for himself.

He and J. R. Dickinson started business at their present location at the height of the depression and made a complete success of their undertaking, notwithstanding the poor business conditions during the years that followed.

Jack Hacker was very well known in the oil industry, the water works industry, the Gas Association and in the industrial world in general. He was loved and respected by all with whom he came in contact and his genial smile and friendly handclasp will be missed by members of the various associations and many hundreds of business and personal friends.

The Hacker Pipe & Supply Co. employs some forty men and women, all of whom are deeply grieved at the loss of their leader and feel that they have indeed lost a friend.

Mr. Hacker was a member of various supply jobbers associations, the Los Angeles Athletic Club, and the Eagle Rock Masonic Lodge.

Lunkenheimer Co. Elects Burdorf and Rhame to Board

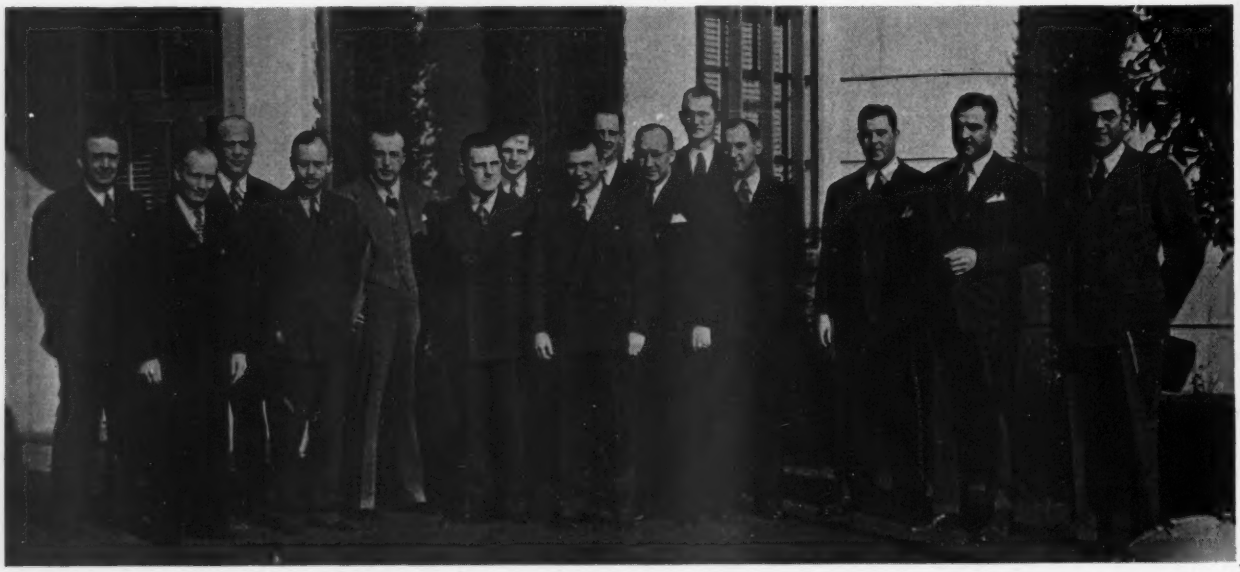
Harry A. Burdorf and Frank P. Rhame, vice presidents of the Lukenheimer Co., Cincinnati, Ohio, were elected to the board of directors at the annual stockholders meeting Feb. 27.

Mr. Burdorf, who has been with the company since 1905, is vice president in charge of sales, and Mr. Rhame, who has been with Lunkenheimer since 1919, is vice president in charge of sales engineering. Both are well known in business and industrial circles.

Petroleum pays about 3½ million dollars in taxes every day.

A high pressure rubber hose capable of withstanding internal pressures of 15 tons and more a square inch is on the development horizon for use in geophysical survey work.

Natural and petroleum refinery gas will furnish raw material for a new chemical processing plant in Texas.



Lane-Wells Company officers, attending the Company's 1941 Sales Convention in Los Angeles. Left to right, Walter T. Wells, Chairman of the Board; G. F. Turchek, Mechanical Research Engineer; D. S. Jeppson, Controller; J. W. McPhee, California Division Manager; Rodney S. Durkee, President; M. E. Montrose, Vice-president and General Sales Manager; Chas. H. Barnes, Production Engineer; E. R. Smith, Sales Engineer; D. M. Anderson, California Division Sales Manager; M. L. Dorn, Vice-president and Chief Engineer; J. Murray Walker, Canadian Division Manager; J. E. Huff, Jr., Acting Gulf Coast Sales Manager; R. B. McCullar, Mid-Continent Division Manager; Charles T. Casebeer, Mid-Continent Division Sales Manager; M. T. Higgs, Gulf Coast Division Manager.

Howard Supply Made D+B Sucker Rod Agents

William C. Kinder, sales manager, D+B Division, Emsco Derrick & Equipment Co., announces the appointment of Howard Supply Co., Los Angeles, as a

William C. Kinder

George Trembley

distributor in California for D+B Sucker Rods. This additional distributorship, stated Mr. Kinder, is in line with the company's progressive policy of always seeking to render increased service. The advancement of pumping methods, and the reduction of pumping costs—a policy that has earned for D+B products a wide reputation for efficiency, reliability and economy.

In confirming this appointment, George Trembley, vice president of the Howard Supply Co., advised that plans have been completed by his company for a more progressive sales and service procedure, with increased cooperation on field service from the Howard Supply Co.'s conveniently located and fully stocked branches at Bakersfield, Long Beach, Ventura, Huntington Beach, Montebello, Cole's Levee, Coalinga, Avenal and Torrance.

"Doc" Miller Joins R. E. Havenstrite, Operator

R. E. Havenstrite, Operator, announces that M. E. "Doc" Miller has been appointed purchasing agent and that Dean H. Sheldon, formerly with the Union Oil Co., has been retained as engineer in charge of operations.

You are reading the Pacific Coast oil men's home paper.

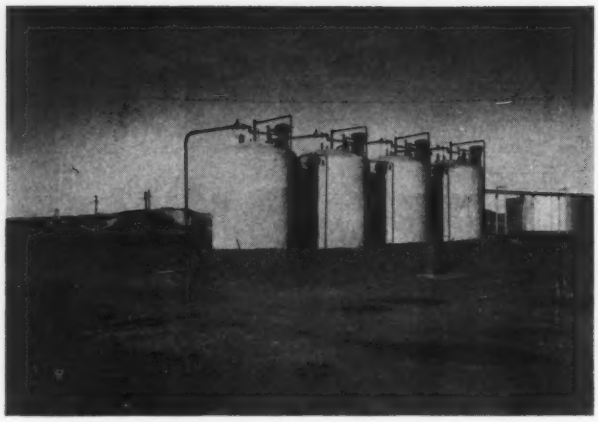
Review of the Year 1940

Supplementing the regular monthly report, the following yearly figures are presented:

Crude oil production for 1940 totaled 223,881,712 barrels, a decrease of 472,336 barrels under 1939 production. The daily average for the year was 611,699 barrels, compared with 614,669 for the previous year, a decrease of 2,970 barrels per day. 486 wells were abandoned during the year. Of these, 321 were abandoned oil producers and 9 were gas wells; 154 were abandoned while drilling for oil and 2 while drilling for gas.

Below is shown the total production for the year and the daily average, also the oil well completions and initial daily output for the year, for each oilfield in the State:

	Total 1940 Production	Daily Average	Wells Completed	Daily Initial Output
Group No. 1				
Arvin	646,548	1,766	2	2,538
Belridge—North	3,860,926	10,549	12	4,901
Belridge—South	752,732	2,056	..	.....
Canal	2,033,770	5,557	6	4,794
Canfield Ranch	15,764	46	..	.....
Coalinga	9,915,792	27,092	92	166,843
Cole's Levee	1,329,813	3,633	20	13,235
Edison	868,300	2,372	10	1,136
Elk Hills	4,427,223	12,096	..	.....
Fruitvale	2,071,914	5,661	1	80
Greeley	1,475,378	4,031	18	41,799
Kern River	4,081,861	11,153	29	355
Kettleman North Dome	16,729,502	45,709	38	42,760
Lost Hills	1,405,339	3,839	3	72
McKittrick	1,316,775	3,598	7	950
Midway-Sunset	18,397,393	50,266	26	3,935
Mountain View	2,414,878	6,598	1	75
Mount Poso	3,424,980	9,358	6	590
Paloma	129,878	355	4	5,166
Rio Bravo	3,303,835	9,027	34	51,269
Round Mountain	2,691,430	7,354	6	1,182
Strand	527,621	1,441	4	6,792
Ten Section	3,518,036	9,612	37	72,116
Tupman	1,259,156	3,440	38	51,809
Wasco	570,216	1,558	5	15,299
Wheeler Ridge	112,883	308	..	.....
Group No. 2				
Capitan	650,858	1,778	..	.....
Elwood	1,286,146	3,514	..	.....
Rincon	1,609,319	4,397	13	4,102
San Miguelito	1,163,071	3,178	9	12,923
Santa Barbara	84,112	230	1	25
Santa Maria	2,215,975	6,055	5	3,360
Santa Maria Valley	6,096,086	16,656	10	5,013
Summerland	8,434	23	..	.....
Ventura Avenue	12,569,511	34,343	42	68,519
Ventura-Newhall	2,866,215	7,831	26	17,130
Watsonville	9,150	25	..	.....
Group No. 3				
Brea-Olinda	2,070,210	5,656	3	464
Coyote—East	1,385,650	3,786	13	3,671
Coyote—West	2,667,014	7,287	2	705
Domingues	7,665,156	20,943	25	18,476
El Segundo	784,946	2,145	..	.....
Huntington Beach	9,592,134	26,208	32	16,433
Inglewood	4,365,975	11,929	3	2,953
Lawndale	14,738	40	..	.....
Long Beach	16,009,359	43,471	28	3,417
Los Angeles-Salt Lake	194,684	532	..	.....
Montebello	7,239,982	19,781	37	12,827
Playa Del Rey	1,498,274	4,094	..	.....
Potrero	687,408	1,878	6	1,719
Richfield	3,228,127	8,820	7	587
Rosecrans	4,258,632	11,636	36	18,789
Santa Fe Springs	9,437,770	25,786	..	.....
Seal Beach	2,557,204	6,987	4	2,804
Torrance	4,007,224	10,949	3	265
Whittier	180,798	494	1	55
Wilmington	30,195,607	82,502	154	83,366
Group No. 4—Gas Fields				
Buena Vista Lake	.....	.....	1	Gas
Buttonwillow	.....	.....	..	.....
Chowchilla	.....	.....	..	.....
Delano	.....	.....	10	Gas
Fairfield Knolls	.....	.....	..	.....
Goleta	.....	.....	..	.....
Marysville Buttes	.....	.....	..	.....
McDonald Island	.....	.....	..	.....
Rio Vista	.....	.....	4	Gas
Semi-Tropic	.....	.....	..	.....
Tracy	.....	.....	..	.....
TOTAL	223,881,712	611,699	874	765,299



Four unit Petreco Electromatic Dehydration plant at Caleto Cordoba Chubut, Argentina. Right, Petreco engineer with oil company representatives in Argentina.

Petreco Engineer Tours South America

Levering Lawrason of the engineering staff of Petroleum Rectifying Co., of California recently returned to his office at Long Beach from a six months trip to various oil fields of the Argentine, South America, where he assisted in the modernization of many Petreco Electromatic Dehydrating plants in use in that territory.

Among the fields visited by Mr. Lawrason were Comodora Rivadavia, one of the oldest producing areas in the Argentine and located about one thousand miles south of Buenos Aires; Mendoza; and a La Plata refinery where the Petreco Dehydration Process has been used for many years.

Mr. Lawrason says it is his experience that representatives of companies in the United States are cordially welcomed by South American operators, and that every cooperation possible is extended to them. He was given permission to photograph many Petreco plants in service, some of which are reproduced here, as well as other oil field views. Living conditions in most of the larger oil producing areas, such as Comodora Rivadavia, are excellent, he reports, as the companies have done everything they possibly can to bring this about. He expects to make another trip of this character during the present year.

Appoint Republic Hamer Distributor

Appointment of Republic Supply Co. of California as exclusive California Distributors for all Hamer products is announced by L. S. Hamer, president of Hamer Oil Tool Co., Long Beach, Calif.

Republic Supply Co. will maintain complete stocks of Hamer products at all of its 15 field stores and at the general warehouse in Los Angeles. In addition to the complete distribution facilities provided through the Republic Stores, an important consideration from the standpoint of the user is that the servicing of Hamer products will be performed by the field staff of Republic Supply Co. as well as the service men of Hamer Oil Tool Co. Republic's personnel has been thoroughly instructed in the mechanical features and applications of the Hamer line during the pendency of the distributorship arrangements.

The Hamer line of Oil Field equipment now includes Plug Valves for all types of drilling rig service, as well as a series of Grease Seal Plug Valves especially designed for christmas trees and for use on lines carrying highly volatile and hard-to-hold liquids, such as butane, and high-pressure gases; a Plug Valve-Flow Bean combination for use on christmas trees; a complete series of Line Blinds ranging from high-pressure gear-operated types to inexpensive and simple bolted types for refinery, tank farm, and chemical plant applications; highly improved Slush Pump Valve Seats and Valves, and a new type Slush Pump Piston which is said to have important and extremely favorable showing in high-pressure deep drilling operations during the past year.

In its position of exclusive California distributor for Hamer products, Republic Supply Co. is enabled to fill orders for this line which originate from other California supply companies, Mr. Hamer announces.

Signed, sealed, and delivered is the agreement under which Republic Supply Co. of California becomes exclusive California distributors of Hamer products. W. L. Duhig, Republic's vice president in charge of sales, hands the agreement to L. S. Hamer, president of Hamer Oil Tool Co., while Republic's manager of purchases and stores, J. J. Pike, looks on.

Caldwell Joins Engineering Staff Emsco D&B Division

The Emsco Derrick & Equipment Co., manufacturers of an extensive line of oil well drilling and production equipment, announces the appointment of Blake W. Caldwell to the engineering staff of the D&B Division.

Blake W. Caldwell

Mr. Caldwell, formerly chief engineer for the past nine years with the Walter O'Bannon Co. of Tulsa, Okla., is a graduate of the A & M College of Texas, with a Master of Science Degree in Engineering and a three year term as a member of the faculty of A & M to his credit.

His wide technical knowledge of oil field problems, both theoretical and practical has gained for him the recognition as one of the coming engineers of the country. For years he has been closely connected with API work and is now vice chairman of the Pump Manufacturers Sub-Committee of API, concentrating his activities in the development of present deep well pump standards.

With his appointment Mr. Caldwell advised that he has completed arrangements to make his home in Los Angeles.

Zublin Announces New Differential Bit

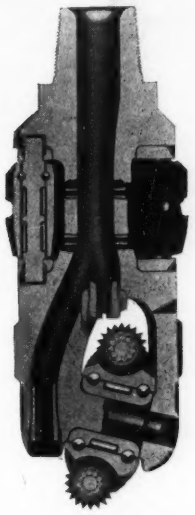
A departure from traditional drilling bit design is announced by Universal Engineering Co., Los Angeles in presenting the improved Zublin Differential Bit.

A most original feature of this bit consists in fitting the plane of the roller carrier at a 15 degree angle with the axis of the drill pipe. The roller carrier is equipped with nine barrel shaped roller cutters, four wide and five narrow, each having three discs or three rows of saw teeth, depending on the character of the formation. Three sets of gauge rollers control the size of the hole. The carrier revolves on ball bearings in a hardfaced heat-treated alloy cast steel shank.

Instead of concentric rotation with the cutting edges in constant tracking contact with the formation and the production of a flat bottomed hole, the Zublin Differential cuts a perfectly spherical bowl by a threefold, non-concentric combination of rotations. The bit shank rotates with the drill pipe. For every 4¼ revolutions of the drill pipe, the cutter wheels make one revolution and the rollers in the cutter wheel rotate independently against the formation.

The cutters describe downward and upward spirals that criss-cross at an angle of 30 degrees. There is no tracking and no dead centers, and the rollers are self-cleaning, the makers say.

One important advantage claimed for the Zublin Differential Bit is its ability



to drill a straight hole rapidly and smoothly while rotating at from 200 to 400 r.p.m., with ½ to 2 points of weight. Records are cited to prove that drilling speed has been increased from 30% to 300%.

Disc rollers are recommended for sandy and sticky formations. Saw tooth rollers have been efficient in breaking up shales such as the hard Brown and Kreyenhagen encountered in the California oil fields.

Further information will be furnished by Universal Engineering Co., Ltd., 2369 East 51st St., Los Angeles, Calif.

New Standard Tanker Arrives in San Francisco

The S. S. "M. E. Lombardi", latest addition to the Standard Oil Co. of California's fleet of seventeen ocean-going tankers, is scheduled to arrive in San Francisco Bay. The vessel was launched at Chester, Penna., Sept. 28, and its arrival here marks completion of the maiden voyage from New York.

The ship is now scheduled to enter the company's Pacific Coast, Alaska, and Hawaiian Island runs, with her home port San Francisco.

The "Lombardi" incorporates both the most advanced methods of construction, with latest features for safe and efficient navigation and cargo handling. The same high standards prevail as exist with all other ships of the Standard Oil fleet for quarters of both officers and crew. These include a crew's recreation room and single and double quarters, with forced ventilation and hot and cold running water for the men.

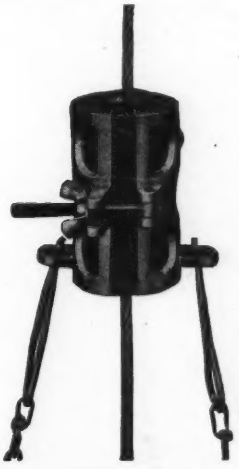
The new vessel has seven main cargo tanks and a deadweight capacity of 7700 tons, with a volumetric capacity of 60,000 42-gallon barrels. Propulsion is with high pressure steam turbines of 3100 shaft h.p. utilizing double reduction gears that will give the ship a speed of from 13 to 14 knots. General specifications are:

Overall length	397 feet
Breadth	57 feet
Depth	29 feet

The Standard Oil fleet was recently presented with the accident prevention award of the American Petroleum Institute in recognizing its leadership in the reduction of its accident rate among its personnel.

Patterson-Ballagh Wiper Developed for Oil Lines

An effective wire line wiper, somewhat similar in design to the Patterson- Ballagh Wire Line Guide, has been developed by Patterson-Ballagh Corp. Known as Style B, this wire line wiper is developed especially for service on producing wells where gas and high gravity oil is encountered. It comprises a steel housing and an easily replaceable one-piece rubber refill. The housing is a hinged steel casting, held together with a quick acting butterfly nut and hinged bolt, and equipped with hold-down chains. Wiping is done with a one-piece, spirally wound, replaceable rubber refill. The wire line running through this wiper is completely stripped of oil and muck. Details regarding wire line wiper, Style B, may be obtained from the manufacturer, Patterson-Ballagh Corp., 1900 E. 65th St., Los Angeles, Calif.



T. M. Johnston Leaves on South American Trip

T. M. Johnston, service manager for M. O. Johnston Oil Field Service Corp., Los Angeles, left early in February for an extended business trip to South America in the interests of his company. He expects to be gone several months, covering Trinidad, Venezuela and Colombia.

T. M. Johnston

Mr. Johnston has been associated with M. O. Johnston Oil Field Service Corp. for the past seven years in a service capacity. During that time, he has personally supervised over two thousand formation tests, made under every conceivable well condition. His extensive knowledge of Johnston Testing methods and equipment will enable him to render much helpful service while on his South American tour.

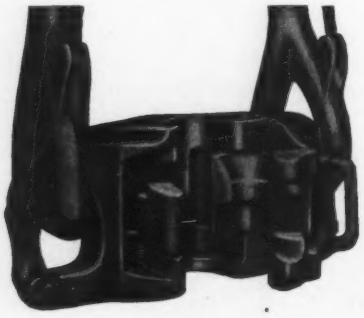
Byron Jackson Type BB Side-Door Elevator

Byron Jackson Co. announces the development of a new elevator for handling strings of external upset drill pipe weighing up to 300 tons. This Type BB Elevator is of the side-door type and is of extra heavy construction, made of alloy steel, properly heat treated to give maximum strength, and to withstand shock loads.

The side-door acts as a strong connecting latch which prevents the body from spreading under the wedging action imposed by the external upset of the drill pipe when extremely heavy loads are carried. When the elevator is swung into position around the drill pipe below the upset a "closing finger" (which is integral with the door) causes the door to swing shut and latch automatically. As the load is taken, the upset fits into the recessed and tapered upper portion of the body where it remains until the load is relieved and the elevator is dropped below the upset. The T-head latch which locks the side-door has a positive, horizontal action which is not affected by vertical jars and shocks. A curved end on the latch facilitates easy opening when the load has been relieved.

A rear handle, integral with the body, contributes to the safety and speed of handling the elevator by offering a convenient way to swing the elevator on and off of the pipe.

The BJ Type BB Side Door Elevator is regularly furnished for external upset drill pipe, having the standard 18 degree angle, but can be bored to meet other specifications. For further information regarding this elevator write to Byron Jackson Co., P. O. Box 2017 Terminal Annex, Los Angeles, Calif.

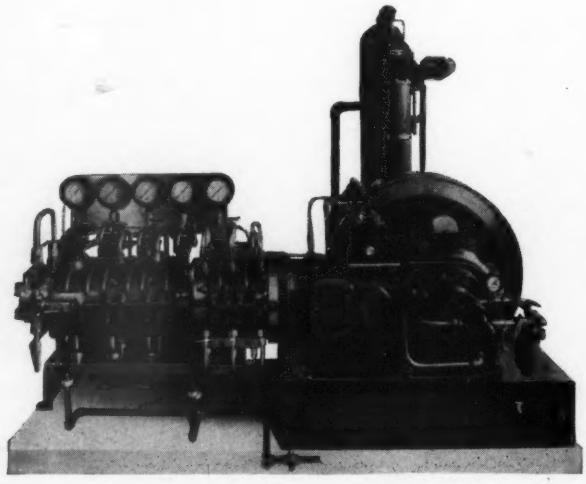


Clark New 15,000-Lb. 5-Stage Compressor

Clark Bros. Co., Inc., Olean, New York, one of the leading makers of compressors for industrial service, have announced a new horizontal compressor for air or gas which will handle pressures up to 15,000 pounds per square inch. The new unit is small, compact and adaptable to any type of drive. It is particularly suitable for use by chemical and oil companies, research laboratories and schools where special processes are employed involving air or gas compression. Clark also offers high-pressure compressors in other sizes.

Clark Bros. Co., Inc., has been an outstanding leader in the development of high-pressure compressor equipment for the oil and gas industries, particularly in the fields of pressure maintenance, gas recycling, refining, and oil and gas pipe line operation.

Smith Booth Usher, 2001 S. Sante Fe St., Los Angeles, are Pacific Coast representatives for Clark Bros. Co., Inc.



Trinidad Drillers Vacation in Los Angeles

David Chisholm and Joseph Dunphy, drillers for the Trinidad Petroleum Development Co., operating in the Palo Seco area in Trinidad, have been on vacation in the Los Angeles area since December, and were to leave Los Angeles Feb. 1 to sail from Boston to Trinidad.

Mr. Dunphy is well known in the Los Angeles area, having worked for a number of operating companies and contractors. His home is 2244 118th St., Compton.

Mr. Chisholm is an old employe of Standard of Calif., and has resided in Bakersfield and Taft for many years. These two visitors report conditions in Trinidad to be very active. They are also boosters of the climate and general working conditions on that island.

Performance of gasoline has been boosted since 1927 by about 45 per cent, while economy, in terms of ton miles per gallon, has been improved by an average of 20 per cent.